



**AYDIN ADNAN MENDERES UNIVERSITY**  
**GRADUATE SCHOOL OF HEALTH SCIENCES**  
**VETERINARY PHYSIOLOGY**  
**PHYSIOLOGY (VETERINARY)**  
**PHYSIOLOGY (VETERINARY) MASTER**  
**COURSE INFORMATION FORM**

Course Title	Special Senses								
Course Code	VFZ526		Course Level		Second Cycle (Master's Degree)				
ECTS Credit	2	Workload	50 (Hours)	Theory	1	Practice	0	Laboratory	0
Objectives of the Course	Understanding the physiological mechanisms of special senses								
Course Content	Vision, hearing, taste and smell								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), 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	2	1
Term Assignment	1	1

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

Week	Weekly Detailed Course Contents	
1	Theoretical	Eye physiology
2	Theoretical	Photoreceptors in retina
3	Theoretical	Receptor potential and formation of the image
4	Theoretical	Mechanism of the information processes in the retina
5	Theoretical	Accommodation
6	Theoretical	Color vision
7	Theoretical	Vision in dark
8	Theoretical	Midterm
9	Theoretical	Electrophysiology of the cochlea
10	Theoretical	The vestibular organ
11	Theoretical	Vestibular reflexes
12	Theoretical	Sacculus and utriculus
13	Theoretical	Smell and touch
15	Theoretical	Presentations

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	1	28



Assignment	2	2	1	6
Term Project	1	6	1	7
Quiz	2	0.5	1	3
Midterm Examination	1	1	1	2
Final Examination	1	3	1	4
Total Workload (Hours)				50
[Total Workload (Hours) / 25*] = ECTS				2

\*25 hour workload is accepted as 1 ECTS

### Learning Outcomes

1	To learn about the types of specialized receptor about special senses
2	To have knowledge about the formation of potentials i the sensory receptors
3	To learn mechanism of the occurrence of impuls in retinal, cochleal sensory receptors
4	To have knowledge about impuls transmission in special senses and its interpretation in the central nervous system alert
5	To have knowledge about formation of vision, hearing and balance

### Programme Outcomes (Physiology (Veterinary) Master)

1	Understands and defines the interdisciplinary interaction with the associated fields
2	Uses theoretical and practical information learned in the education
3	Creates solution proposals by using background education
4	Combines and interprets the information from different disciplines, and creates solution proposals and scientific information to contribute the solution process, when needed
5	Involves in professional organizations and institutions related with the educational background
6	Takes responsibility for individual and group work, and do the assignments in line with the skills
7	Communicates with the professionals out of the field when it is necessary, and contributes to the solution as a team member
8	Understands the production and publishing methods of scientific information
9	Determines the source and the type of information that is needed related with the field and chooses the activities that s/he wants to participate, by using his/her critical thinking abilities that is developed in the education
10	Excels technological devices both for professional and social purposes
11	Compiles any kind of data related with the field (field observations, produced scientific information etc.) and analyzes and interprets the results according to the aims of the research
12	Determines the environmental health rules and applies them for prevention
13	Applies the knowledge gained in professional level with the awareness of the needs of the region and the country, and develops a defense capability
14	Conceptualizes the phenomena and the events related with the field, studies scientific methods and techniques, interprets results; analyzes and hypothesizes methods in accordance with the results and designs solution or treatment alternatives addressing the problems
15	Follows up the updates of information in the field by using all kinds of sources (scientific information, legislations etc.), and uses when needed

### 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	2	2	2
P3	2	2	2	2	2
P4	2	2	2	2	2
P5	1	1	1	1	1
P6	1	1	1	1	1
P7	1	1	1	1	1
P8	1	1	1	1	1
P9	2	2	2	2	2
P10	1	1	1	1	1
P11	4	4	4	4	4
P12	1	1	1	1	1
P13	1	1	1	1	1
P14	1	1	1	1	1
P15	3	3	3	3	3

