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

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Course Title | Reproductive System and Its Functions | | | | | | | | |
| Course Code | VFZ525 | | Couse Level | | Second Cycle (Master's Degree) | | | | |
| ECTS Credit | 4 | Workload | 100 *(Hours)* | Theory | 2 | Practice | 0 | Laboratory | 0 |
| Objectives of the Course | To be comprehended the importance of the reproductive system at the basis of physiological mechanisms | | | | | | | | |
| Course Content | Functional anatomy of the male and female reproductive organs, spermatogenesis and oogenesis, sex hormones | | | | | | | | |
| 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 | Krohmer R.W.(2005). Your Body How It Works. The Reproductive System. Chelsea House, Publishing, New York |
| 2 | Morel D. (2003). Equine Reproductive Physiology, Breeding and Stud Management. CABI Publishing, London |
| 3 | Reece W.O. (2008) Dukes Veteriner Fizyoloji Cilt I ve II, Onikinci Baskı (Türkçe Çeviri). Ed: Yıldız S. Medipres, Malatya |
| 4 | Guyton AC, Hall JE (2001) Tıbbi Fizyoloji Onuncu baskı (Türkçe Çeviri). Ed: Çavuşoğlu H. Nobel Tıp Kitabevi, İstanbul |
| 5 | Noyan A. (2003). Yaşamda ve Hekimlikte Fizyoloji. 13. baskı, Meteksan-Ankara |
| 6 | Randall D., Burggren W., French K, Fernald R., (1997). Eckert Animal Physiology. Mechanisms and Adaptations. 4th Ed., New York |
| 7 | G.C. Whittow et al. (1998). Sturke's Avian Physiology |
| 8 | Willmer P., Stone G., Johnston I. (2005). Environmental Physiology of Animals. 2nd Ed. Blackwell Publishing |

| **Week** | **Weekly Detailed Course Contents** | |
|---|---|---|
| 1 | Theoretical | Reproductive organs of farm animals |
| 2 | Theoretical | Reproductive organs in poultry |
| 3 | Theoretical | Stages of spermatogenesis and sperm development |
| 4 | Theoretical | Stages of oogenesis and oocyte formation |
| 5 | Theoretical | Comparison of spermatogenesis and oogenesis |
| 6 | Theoretical | Fertilization |
| 7 | Theoretical | The structure of the female reproductive system |
| 8 | Theoretical | Midterm |
| 9 | Theoretical | Roles in the development of the reproductive system of male reproductive hormones |
| 10 | Theoretical | Roles in the development of the reproductive system of female reproductive hormones |
| 11 | Theoretical | Some developmental changes in the uterus and ovary |
| 12 | Theoretical | The effects of seminal vesicles, the prostate and the bulbourethral glands on fertilization -I |
| 13 | Theoretical | The effects of seminal vesicles, the prostate and the bulbourethral glands on fertilization -II |
| 14 | Theoretical | Presentations |
| 15 | Theoretical | Discussion |

| Workload Calculation | | | | |
|---|---|---|---|---|
| Activity | Quantity | Preparation | Duration | Total Workload |
| Lecture - Theory | 14 | 1 | 2 | 42 |
| Assignment | 2 | 4 | 1 | 10 |
| Term Project | 1 | 24 | 1 | 25 |
| Quiz | 2 | 1 | 1 | 4 |
| Midterm Examination | 1 | 7 | 1 | 8 |
| Final Examination | 1 | 10 | 1 | 11 |
| | | | Total Workload (Hours) | 100 |
| | | | [Total Workload (Hours) / 25*] = **ECTS** | 4 |
| **25 hour workload is accepted as 1 ECTS* | | | | |

| Learning Outcomes | |
|---|---|
| 1 | To learn about the structure of male and female reproductive organsin animals |
| 2 | To learn the physiological events and processes of spermatogenesis |
| 3 | To learn the physiological events and processes of oogenesis |
| 4 | To learn about roles and importance of male reproductive hormones affected in the development of reproductive system |
| 5 | To learn about roles and importance of female reproductive hormones affected in the development of reproductive system |
| 6 | To be able to developmentally compare of male and female reproductive system |

| **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 | L6 |
|---|---|---|---|---|---|---|
| P1 | 2 | 2 | 2 | 2 | 2 | 2 |
| P2 | 4 | 4 | 4 | 4 | 4 | 4 |
| P3 | 4 | 4 | 4 | 4 | 4 | 4 |
| P4 | 2 | 2 | 2 | 2 | 2 | 2 |
| P5 | 3 | 3 | 3 | 3 | 3 | 3 |
| P6 | 1 | 1 | 1 | 1 | 1 | 1 |
| P7 | 1 | 1 | 1 | 1 | 1 | 1 |
| P8 | 3 | 3 | 3 | 3 | 3 | 3 |
| P9 | 2 | 2 | 2 | 2 | 2 | 2 |
| P10 | 3 | 3 | 3 | 3 | 3 | 3 |
| P11 | 4 | 4 | 4 | 4 | 4 | 4 |

| | | | | | | |
|---|---|---|---|---|---|---|
| P12 | 1 | 1 | 1 | 1 | 1 | 1 |
| P13 | 4 | 4 | 4 | 4 | 4 | 4 |
| P14 | 3 | 3 | 3 | 3 | 3 | 3 |
| P15 | 3 | 3 | 3 | 3 | 3 | 3 |