



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

|  |   |   |                     |  |   |                                |   |            |   |
|--|---|---|---------------------|--|---|--------------------------------|---|------------|---|
| Course Title                                     |   | Applications and Usage of Drugs in Poultry  |                     |  |   |                                |   |            |   |
| Course Code                                      |   | VFT544  |                     | Course Level   |   | Second Cycle (Master's Degree) |   |            |   |
| ECTS Credit                                      | 4 | Workload  | 94 ( <i>Hours</i> ) | Theory   | 1 | Practice                       | 2 | Laboratory | 0 |
| Objectives of the Course                         |   | To be informed about gastrointestinal physiology and the importance of poultry, the general rules for drug use in poultry, poultry pharmacokinetics of drugs, drug elimination, drug application, with the importance of vaccination and the major drug groups used in poultry (antibacterial, antiparasitic, feed additives and growth promoters, vitamins and mineral substances, antiseptics and disinfectants, antifungals, and vaccines) and the properties and uses.    |                     |  |   |                                |   |            |   |
| Course Content                                   |   | Gastrointestinal physiology and the importance of poultry, the general rules for drug use in poultry, poultry pharmacokinetics of drugs, drug elimination, drug application, with the importance of vaccination and the major drug groups used in poultry (antibacterial, antiparasitic, feed additives and growth promoters, vitamins and mineral substances, antiseptics and disinfectants, antifungals, and vaccines, etc.) and their properties are studied with the use. |                     |  |   |                                |   |            |   |
| 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        | 40             |
| Final Examination   | 1        | 60             |

### Recommended or Required Reading

|   |  |
|---|--|
| 1 | Veterinary Pharmacology and Therapeutics, 8th Edition, Jim E. Riviere (Editor), Mark G. Papich (Editor), 2009.                                     |
| 2 | Modern Pharmacology, 6th Edition, Lippincott Williams and Wilkins, 2004 (Ed. C.R. Craig and R.E. Stitzel)  |
| 3 | Goodman and Gilman's The Pharmacological Basis of Therapeutics 11th Edition, McGraw-Hill, 2006 (Eds. Brunton, Lazo, Parker, Buxton and Blumenthal) |
| 4 | Veterinary pharmacology and therapeutics edited by H. Richard Adams. Ames, Iowa State University Press 2001.                                       |
| 5 | Veterinary Drug Therapy, 1994. Ths. B. Barragry.   |

| Week | Weekly Detailed Course Contents |   |
|------|---------------------------------|---|
| 1    | Theoretical                     | Gastrointestinal physiology and the importance of different avian species                       |
|      | Practice                        | Examination of the anatomical structure of the gastrointestinal tract in poultry                |
| 2    | Theoretical                     | Gastrointestinal physiology and the importance of different avian species                       |
|      | Practice                        | Examination of the anatomical structure of the gastrointestinal tract in poultry                |
| 3    | Theoretical                     | General rules regarding the use of drugs in poultry   |
|      | Practice                        | Pharmacokinetic calculations in poultry   |
| 4    | Theoretical                     | The pharmacokinetics of drugs in poultry  |
|      | Practice                        | Pharmacokinetic calculations in poultry samples   |
| 5    | Theoretical                     | The elimination of drugs in poultry   |
|      | Practice                        | Routes of administration of drugs in poultry  |
| 6    | Theoretical                     | Drug delivery methods in poultry  |
|      | Practice                        | Examination of field conditions, winged forms of drug application in poultry industry           |
| 7    | Theoretical                     | Article discussion  |
|      | Practice                        | Paper presentation  |
| 8    | Intermediate Exam               | -   |
| 9    | Theoretical                     | And properties of the antibacterial drugs used in poultry                                       |
|      | Practice                        | Antibacterial drug applications in poultry  |
| 10   | Theoretical                     | Antiparasitic drugs used in poultry and their properties  |
|      | Practice                        | Antiparasitic drug applications in poultry  |
| 11   | Theoretical                     | Drugs used in poultry feed additives and the development and characteristics of the accelerator |



|    |             |   |
|----|-------------|---|
| 11 | Practice    | Accelerating growth in poultry feed additives and pharmaceutical applications |
| 12 | Theoretical | Properties of vitamin and mineral substances used in poultry                  |
|    | Practice    | Vitamins and minerals in poultry applications                                 |
| 13 | Theoretical | Antiseptic and disinfectant properties of drugs used in poultry and           |
|    | Practice    | Pharmaceutical applications of antiseptics and disinfectants in poultry       |
| 14 | Theoretical | Characteristics and features of antifungal drugs used in poultry vaccines     |
|    | Practice    | Antifungal drug and vaccine applications in poultry                           |
| 15 | Theoretical | Article discussion  |
|    | Practice    | Paper presentation  |
| 16 | Final Exam  | Final   |

### Workload Calculation

| Activity                                     | Quantity | Preparation | Duration | Total Workload |
|--|----------|-------------|----------|----------------|
| Lecture - Theory                             | 14       | 2           | 1        | 42             |
| Lecture - Practice                           | 14       | 1           | 2        | 42             |
| Midterm Examination                          | 1        | 3           | 1        | 4              |
| Final Examination                            | 1        | 5           | 1        | 6              |
| Total Workload (Hours)                       |          |             |          | 94             |
| [Total Workload (Hours) / 25*] = <b>ECTS</b> |          |             |          | 4              |

\*25 hour workload is accepted as 1 ECTS

### Learning Outcomes

|   |  |
|---|--|
| 1 | Learn about on the importance of gastrointestinal physiology in poultry.   |
| 2 | Learn about the general rules regarding drug use in poultry.   |
| 3 | Learn about The pharmacokinetics of drugs in poultry, the elimination of drug administration, vaccination, and the importance. |
| 4 | Learn about poultry used drug classes, the features and use.   |
| 5 | To find out and use resources about the profession in the area.  |

### Programme Outcomes (Veterinary Pharmacology and Toxicology Master's Without Thesis)

|    |  |
|----|--|
| 1  | to be able to comprehend expert knowledge on field of pharmacology and toxicology in veterinary medicine   |
| 2  | to be able to define expert knowledge on interdisciplinary interaction in pharmacology and toxicology  |
| 3  | to be able to formulate ideas to solve complex problems using theoretical and practical information gained throughout the pharmacology and toxicology education.   |
| 4  | to be able to integrate and interpret information in the area of pharmacology and toxicology with information in different fields and, if the need arises, provides scientific information and solutions to solve problems.  |
| 5  | to be able to develop and use strategies in his/her field of expertise in Master's Program of Pharmacology and Toxicology  |
| 6  | to be able to comprehend methods of obtained and submitted scientific knowledge  |
| 7  | to be able to analyse current information related to his/her field of expertise (scientific information, procedures etc.) and use them when necessary  |
| 8  | to be able to apply technological tools in social relationships of vocational and professional environment.  |
| 9  | to be able to review, evaluate and interpret any data (field observations, available scientific information etc.) towards a specific purpose.  |
| 10 | to be able to comprehend expert knowledge on the function and basic pharmacological features of pharmacology and sub-branches of science, relationship between the drug and poison, pharmacokinetic, effects of the drugs, the dose-intensity and dose-effect relationship |
| 11 | to be able to identify expert knowledge on the function and basic toxicological features of poison, classifications and types of poisoning, toxicokinetic, general principles of treatment of poisoning.   |
| 12 | to be able to define and use laboratory equipment in a pharmacology and toxicology laboratory.   |

### 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 | 4  |    | 4  | 4  |    |
| P2 |    | 4  |    |    |    |
| P3 |    |    |    | 4  |    |
| P4 |    |    | 5  |    |    |
| P6 |    |    |    |    | 5  |
| P7 |    |    |    |    | 4  |



|     |   |   |   |   |   |
|-----|---|---|---|---|---|
| P9  |   | 4 | 4 |   | 5 |
| P10 | 5 | 5 | 5 | 5 |   |
| P11 | 5 | 5 | 5 | 5 |   |

