# AYDIN ADNAN MENDERES UNIVERSITY
# COURSE INFORMATION FORM

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|---|---|---|---|---|---|---|---|---|---|
| Course Title | | Antibiotics | | | | | | | |
| Course Code | | VFT621 | | Couse Level | | Third Cycle (Doctorate Degree) | | | |
| ECTS Credit | 6 | Workload | 152 *(Hours)* | Theory | 2 | Practice | 0 | Laboratory | 0 |
| Objectives of the Course | | To inform about the chemotherapeutics and detailed information is given about one of its components: antibiotics. To teach the effects, spectrum, inhibitoric power, mode of actions, resistance, mixtures, usage and classification of antibiotics. | | | | | | | |
| Course Content | | Classification and basic principles of chemotherapeutics, beta lactam antibiotics, aminogylcosides, macrolides, lincosamides, polymixins, chloramphenicol, tetracyclines, nitrofuranes, flouroquinolones, imidazole compounds and sulfamycine antibiotics are examined. | | | | | | | |
| Work Placement | | N/A | | | | | | | |
| Planned Learning Activities and Teaching Methods | | | | Explanation (Presentation), Discussion, Case Study, Project Based Study, Individual Study, Problem Solving | | | | | |
| Name of Lecturer(s) | | Prof. Selim SEKKİN | | | | | | | |

| Assessment Methods and Criteria | | |
|---|---|---|
| Method | Quantity | Percentage (%) |
| Midterm Examination | 1 | 40 |
| Final Examination | 1 | 60 |

| Recommended or Required Reading | |
|---|---|
| 1 | Gigue`re S. (2006). Antimicrobial therapy in veterinary medicine. 4th ed. Ames, Iowa: Blackwell Pub. |
| 2 | Andrews AH.(2004). Antimicrobial Agents. In: Andrews AH, editor. Bovine Medicine and Husbandry of Cattle. Oxford: Blackwell Science, 2004:1035-44 |

| Week | Weekly Detailed Course Contents | |
|---|---|---|
| 1 | Theoretical | Introduction, history, classification and side effects of chemotherapeutics |
| 2 | Theoretical | Activity, spectrum, inhibitoric power of antibiotics |
| 3 | Theoretical | Methods for determining the inhibitoric power of antibiotics |
| 4 | Theoretical | Mode of actions of antibiotics |
| 5 | Theoretical | Resistance phenemon, types and importance of antibiotic resistance. Determination of antibiotic resistance. |
| 7 | Intermediate Exam | Midterm exam |
| 8 | Theoretical | Factors that effect antibiotic usage. Specific antibiotic usage fields. |
| 9 | Theoretical | Beta lactam antibiotics (penicillins) |
| 10 | Theoretical | Beta lactam antibiotics (cephalosporins and other beta lactams) |
| 11 | Theoretical | Aminoglycosides and macrolides |
| 12 | Theoretical | Tetracyclines, phenicols, and lincosamides |
| 13 | Theoretical | Quinolones, nitrofurans, imidazoles and rifamicins |
| 14 | Theoretical | Sulphonamides and other antibiotics |
| 15 | Theoretical | Generally assessment |
| 16 | Final Exam | Final |

| Workload Calculation | | | | |
|---|---|---|---|---|
| Activity | Quantity | Preparation | Duration | Total Workload |
| Lecture - Theory | 14 | 2 | 2 | 56 |
| Assignment | 8 | 2.5 | 2 | 36 |
| Individual Work | 8 | 2.5 | 2 | 36 |
| Midterm Examination | 1 | 8 | 2 | 10 |

| | | | | |
|---|---|---|---|---|
| Final Examination | 1 | 12 | 2 | 14 |
| | | | Total Workload (Hours) | 152 |
| | | | [Total Workload (Hours) / 25*] = **ECTS** | 6 |
| **25 hour workload is accepted as 1 ECTS* | | | | |

| **Learning Outcomes** | |
|---|---|
| 1 | Presentation of chemotherapeutics. To learn the sources of chemotherapeutics and to examine the involving problems as well as to be warned about their usages. |
| 2 | To examine the general specification of antibiotics |
| 3 | To acquire the general antibiotic usage and probleme solving |
| 4 | Comparative learning of general antibiotic classes |
| 5 | To give lectures and/or presentations and discuss with professionals in the area. |

| **Programme Outcomes** *(Pharmacology and Toxicology (Veterinary Medicine) Doctorate)* | |
|---|---|
| 1 | Gains expert knowledge on field of pharmacology and toxicology in veterinary medicine and, gains expert knowledge on interdisciplinary interaction in pharmacology and toxicology |
| 2 | To be equipped with the knowledge to develop original ideas about necessary issues in the field by using of both graduate and expertise levels knowledge, to be able to develop original definitions, products and diagnostic procedures, etc. via deepening and questioning these knowledge. |
| 3 | Develops and uses strategies in his/her field of expertise in PhD Program of Pharmacology and Toxicology |
| 4 | Reviews, evaluates and interprets any data (field observations, available scientific information etc.) towards a specific purpose. |
| 5 | Gains 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. |
| 6 | Gains expert knowledge on the function and basic toxicological features of poison, classifications and types of poisoning, toxicokinetic, general principles of treatment of poisoning. |
| 7 | Can offer training to technical staff who will work in pharmacology and toxicology laboratory |
| 8 | Reach to competence to prepare courses at the undergraduate level |
| 9 | Determines and uses laboratory equipment and consumables in a pharmacology and toxicology laboratory. |
| 10 | To be able to plan an interdisciplinary project and build team for the known or new defined problems and to manage and complete such a project when necessary. |
| 11 | To share his/her knowledge in the field with others by attending at field-related or other congresses, panels, symposiums, workshops, seminars, article discussions and problem solving sessions, etc., and to contribute to the solution in the team by establishing relations with the experts in different fields. |
| 12 | To contribute the scientific knowledge in the field via publications in national and international peer-reviewed scientific journals. |
| 13 | Takes roles in vocational organizations and institution. |
| 14 | Forms ideas to solve complex problems using theoretical and practical information gained throughout the pharmacology and toxicology education. |
| 15 | To adopt lifelong learning as a principle and acknowledge that the information gained through research is the most valuable gain. |
| 16 | Knows and protects rights of ideas and industrial property (patent right) |

**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 | 5 | |
| P2 | 5 | 5 | 5 | 5 | |
| P3 | 3 | 5 | 3 | 4 | |
| P5 | 4 | 3 | 5 | 4 | |
| P6 | 5 | 5 | 4 | 5 | |
| P7 | 3 | 4 | 5 | 3 | |
| P8 | | | | | 4 |
| P9 | 4 | 4 | 3 | 4 | |
| P10 | 5 | 5 | 5 | 5 | |
| P11 | 2 | 3 | 2 | 2 | 5 |
| P12 | 3 | 5 | 4 | 5 | |
| P13 | 4 | 4 | 5 | 5 | |
| P14 | 5 | 3 | 5 | 4 | 5 |
| P15 | 3 | 4 | 3 | 4 | |