



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

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|--|---|---|------------|--|---|--------------------------------|---|------------|---|
| Course Title | | Metals and Other Inorganic Poisons | | | | | | | |
| Course Code | | VFT531 | | Course Level | | Second Cycle (Master's Degree) | | | |
| ECTS Credit | 2 | Workload | 56 (Hours) | Theory | 2 | Practice | 0 | Laboratory | 0 |
| Objectives of the Course | | The harmful effects of metals and metal compounds on animals, and to give information about non-metal poisoning occurring organic substance. | | | | | | | |
| Course Content | | Human and animals with acute, subacute and chronic toxicity and nutrient pollution of the environment and can lead to significant arsenic, cadmium, zinc, copper, mercury, lead, copper, selenium, molybdenum, nickel, antimony, cyanide, bismuth, barium, silver, tin, calcium, chromium, cobalt, sulfur, fluorine and magnesium with substances such as inorganic acid or caustic alkalis, nitrate, nitrite, inorganic compounds such as salt, the radioactive material (radium-226, uranium-238, iodine-131, strontium-89, and 90 , lead-210, cesium-137, etc.) and their effects, degrees of impact types and clinical use. | | | | | | | |
| Work Placement | | N/A | | | | | | | |
| Planned Learning Activities and Teaching Methods | | | | Explanation (Presentation), Discussion, Individual Study | | | | | |
| Name of Lecturer(s) | | Prof. Ferda AKAR | | | | | | | |

Assessment Methods and Criteria

| Method | Quantity | Percentage (%) |
|---------------------|----------|----------------|
| Midterm Examination | 1 | 40 |
| Final Examination | 1 | 60 |

Recommended or Required Reading

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| 1 | Hayes, WA (2007) Principles and Methods of Toxicology, 5th Edition, Taylor and Francis, London. |
| 2 | Klaassen, C. (2008) Casarett & Doull's Toxicology: The Basic Science of Poisons, 7th Edition, McGraw-Hill Companies, USA. |
| 3 | Hodgson, E (2010) A textbook of modern toxicology, 4 th Edition, John Wiley and Sons, Inc., Hoboken, Canada. |
| 4 | Casarett & Doull's Toxicology - The Basic Science of Poison. McGraw-Hill Press |

| Week | Weekly Detailed Course Contents | |
|------|---------------------------------|--|
| 1 | Theoretical | General information about Metals |
| 2 | Theoretical | Metals that make up the body's building blocks |
| 3 | Theoretical | İzelements |
| 4 | Theoretical | Creature of the elements of absorption, distribution |
| 5 | Theoretical | Participating in events in the body elements |
| 6 | Theoretical | Basic duties living thing formation |
| 7 | Theoretical | Evaluation |
| 8 | Intermediate Exam | Midterm exam |
| 9 | Theoretical | Poisonings occurring with elements |
| 10 | Theoretical | Poisoning symptoms |
| 11 | Theoretical | Treatment of poisonings |
| 12 | Theoretical | Poisoning by organic substances |
| 13 | Theoretical | Toxicity of organic substances |
| 14 | Theoretical | Evaluation |
| 15 | Theoretical | Discussion |
| 16 | Final Exam | Final |

Workload Calculation

| Activity | Quantity | Preparation | Duration | Total Workload |
|---------------------|----------|-------------|----------|----------------|
| Lecture - Theory | 14 | 1 | 2 | 42 |
| Midterm Examination | 1 | 1 | 1 | 2 |



| | | | | |
|---|---|----|---|----|
| Final Examination | 1 | 10 | 2 | 12 |
| Total Workload (Hours) | | | | 56 |
| [Total Workload (Hours) / 25*] = ECTS | | | | 2 |
| *25 hour workload is accepted as 1 ECTS | | | | |

Learning Outcomes

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|---|---|
| 1 | General information about metals |
| 2 | Information about inorganic poisons. |
| 3 | Detection and treatment of poisoning caused by organic substances |
| 4 | To learn knowledge and propose suggestions on the area |
| 5 | To give lectures and/or presentations and discuss with professionals in the area. |

Programme Outcomes (Veterinary Pharmacology and Toxicology Master)

| | |
|----|---|
| 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 | 3 | 3 | | | |
| P3 | 3 | 3 | | | 5 |
| P4 | | | | | 4 |
| P5 | 5 | 5 | | | 5 |
| P6 | | | | 5 | 5 |
| P7 | | | | 4 | |
| P8 | | | | | 4 |
| P9 | | | | 5 | 5 |
| P10 | 5 | 5 | 5 | | |

