



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

| | | | | | | | | | |
|--|---|---|----------------------|----------------------------|---|--------------------------------|---|------------|---|
| Course Title | | Light Microscopy- Processing and Staining Techniques | | | | | | | |
| Course Code | | VPT604 | | Couse Level | | Third Cycle (Doctorate Degree) | | | |
| ECTS Credit | 4 | Workload | 104 (<i>Hours</i>) | Theory | 2 | Practice | 2 | Laboratory | 0 |
| Objectives of the Course | | Processing and handling of tissues for examination, processing tissues, (fixation, dehydration, clearing, impregnation and embedding) routine staining procedures and special techniques, preparation of sections, methods for connctive tissues, cytoplasmic granuels, atologic and nuclear elements, fats and lipids, carbohydrates and mucoproteins, pigments and minerals, nevre cells and fibers, bacteria, fungi, inclusion bodies. | | | | | | | |
| Course Content | | Processing and handling of tissues for examination, processing tissues, (fixation, dehydration, clearing, impregnation and embedding) routine staining procedures and special techniques, preparation of sections, methods for connctive tissues, cytoplasmic granuels, atologic and nuclear elements, fats and lipids, carbohydrates and mucoproteins, pigments and minerals, nevre cells and fibers, bacteria, fungi, inclusion bodies. | | | | | | | |
| Work Placement | | N/A | | | | | | | |
| Planned Learning Activities and Teaching Methods | | | | Explanation (Presentation) | | | | | |
| Name of Lecturer(s) | | | | | | | | | |

Assessment Methods and Criteria

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

Recommended or Required Reading

| | |
|---|--|
| 1 | Thomson, R.G., (1978) General Veterinary Patology, W.B.Saunders Company. Philadelphia, USA |
| 2 | Gavin, M.D.M., Zachary, J. F. (2007) Pathologic Basis of Veterinary Disease, Mosby, London, UK |

| Week | Weekly Detailed Course Contents | |
|------|---------------------------------|--|
| 1 | Theoretical | Tissues fixation methods |
| | Preparation Work | Book |
| 2 | Theoretical | Processing and handling of tissues for examination |
| | Preparation Work | Book |
| 3 | Theoretical | Processing tissues (fixation, dehydration, clearing, impregnation and embedding) |
| | Preparation Work | Book |
| 4 | Theoretical | Routine staining procedures and special techniques |
| | Preparation Work | Book |
| 5 | Theoretical | Methods for haematologic and nuclear elements |
| | Preparation Work | Book |
| 6 | Theoretical | Methods for fats and lipids |
| | Preparation Work | Book |
| 7 | Theoretical | Methods for carbohydrates and mucoproteins |
| | Preparation Work | Book |
| 8 | Preparation Work | Book |
| | Intermediate Exam | Mid term Exam |
| 9 | Theoretical | Methods for inclusion bodies |
| | Preparation Work | Book |
| 10 | Theoretical | Methods for pigments and minerals |
| | Preparation Work | Book |
| 11 | Theoretical | Methods for nevre cells and fibers |
| | Preparation Work | Book |
| 12 | Theoretical | Methods for cytoplasmic granuels |
| | Preparation Work | Book |
| 13 | Theoretical | Methods for bacteria, fungi |



| | | |
|----|------------------|-----------------------------|
| 13 | Preparation Work | Book |
| 14 | Theoretical | Examination of preparations |
| | Preparation Work | Book |
| 15 | Theoretical | Overview |
| | Preparation Work | Book |
| 16 | Preparation Work | Book |
| | Final Exam | Final Exam |
| 17 | Preparation Work | Book |
| | Final Exam | Final Exam |

Workload Calculation

| Activity | Quantity | Preparation | Duration | Total Workload |
|--|----------|-------------|----------|----------------|
| Lecture - Theory | 14 | 1 | 2 | 42 |
| Lecture - Practice | 14 | 1 | 2 | 42 |
| Midterm Examination | 1 | 8 | 1 | 9 |
| Final Examination | 1 | 10 | 1 | 11 |
| Total Workload (Hours) | | | | 104 |
| [Total Workload (Hours) / 25*] = ECTS | | | | 4 |

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

| | |
|---|--|
| 1 | To be knowledgeable about Processing and handling of tissues for examination, processing tissues |
| 2 | To have knowledge about decalcification and softening methods |
| 3 | To learn the principles of dehydration, transparency and preparation of blocks |
| 4 | To be knowledgeable about methods for connective tissues, cytoplasmic granuels, atologic and nuclear elements, fats and lipids, carbohydrates and mucoproteins, pigments and minerals, nevre cells and fibers, bacteria, fungi, inclusion bodies |
| 5 | To apply methods for connective tissues, cytoplasmic granuels, atologic and nuclear elements, fats and lipids, carbohydrates and mucoproteins, pigments and minerals, nevre cells and fibers, bacteria, fungi, inclusion bodies |

Programme Outcomes (Pathology (Veterinary Medicine) Doctorate)

| | |
|----|---|
| 1 | The student knows lesions of organs and tissues as well as pathological mechanisms of infectious/noninfectious diseases of especially farm and pet animals. |
| 2 | The student intensify theoretical and practical knowledge. |
| 3 | The student will learn and apply a variety of theoretical methods of diagnosis. |
| 4 | Students macroscopic and microscopic signs of diseases characterized by evaluating the clinical findings and examine the comparative. |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |

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 | 5 | 5 | 5 | 5 | 5 |
| P2 | 5 | 5 | 5 | 5 | 5 |
| P3 | 5 | 5 | 5 | 5 | 5 |
| P4 | 5 | 5 | 5 | 5 | 5 |
| P5 | 5 | 5 | 5 | 5 | 5 |
| P6 | 5 | 5 | 5 | 5 | 5 |
| P7 | 5 | 5 | 5 | 5 | 5 |
| P8 | 5 | 5 | 5 | 5 | 5 |
| P9 | 5 | 5 | 5 | 5 | 5 |
| P10 | 5 | 5 | 5 | 5 | 5 |

