

AHP 2105-1: GENERAL PATHOLOGY

4.5 CREDIT HOURS

Purpose of Course

The course is intended to equip the will learn general principles about the processes involved in disease. The course will contribute to the students' understanding fundamental principles of disease and recognizing disease states across the range of species, focusing upon domestic animals.

Pre-requisites:

- Gross Anatomy and Embryology I AHP 1101
- Gross Anatomy and Embryology II APH 1203
- Histology and Cell Biology AHP 1204

Expected Learning Outcomes of the course

At the end of this course the trainee will be able to:

- Describe the pathological basis of diseases.
- Classify the causes and the progression injury or inflammation.
- Recognition of the major types of lesions at gross and microscopic levels.
- Ability to properly describe gross lesions using appropriate pathologic terminology.

Course Content

Introduction to pathology. Aetiology. Cellular injury, degenerative changes, Cell death: autolysis, apoptosis and necrosis. Cellular accumulations and pigments. Inflammation, repair and circulatory disturbances. Disorders of growth and neoplasia. Immunopathology. Demonstration of general pathological changes at histological level. A visit to laboratories will be organised.

Mode of Delivery:

Lectures, discovery learning, problem-based learning, experiential learning, group-based learning, independent studies and e-learning.

Instructional Materials and Equipment:

Projector; Textbooks; pathology demonstration practical in the laboratories; Computer laboratory.

Course Assessment

Type

Weighting (%)

Continuous Assessment Tests - 50

Final Examination -50

Total 100

Core Reading Materials for the course

Textbooks

1. Ackermann, M. R. (2011). Pathologic Basis of Veterinary Disease. In Pathologic Basis of Veterinary Disease. Elsevier Health Sciences. ISBN 0323291724, 9780323291729.
2. Maxie, G. (2015). Jubb, Kennedy & Palmer's Pathology of Domestic Animals - E-BOOK: Volume 3 (Issue v. 3). Elsevier Health Sciences. ISBN 0702068322, 9780702068324
3. Muger, G. M. (2000). Veterinary Pathology in The Tropics: For Students and Practitioners. New Age International (P) Limited. ISBN 812241284X, 9788122412840

Course Journals

- Animal Pathology
- Journal of Veterinary Medicine

Recommended reference material:

- David O. Slauson, Barry J. Cooper. (2010). Mechanisms of Disease a Textbook of Comparative General Pathology. (3rd ed). Mosby.
- Gant A. Sastry (2011). Veterinary Pathology.
- J. L. Begard (2005). Textbook of veterinary pathology: General pathology.

Reference Journals

- General Pathology and Pathological Anatomy
- The Scandinavian Journal of Laboratory Animal Science
- American Journal of Animal and Veterinary Sciences
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MAASAI MARA UNIVERSITY

**REGULAR UNIVERSITY EXAMINATIONS
2023/2024 ACADEMIC YEAR**

SECOND YEAR FIRST SEMESTER

**SCHOOL OF NATURAL RESOURCE,
ENVIRONMENTAL STUDIES AND
AGRICULTURE**

**BACHELOR OF SCIENCE IN ANIMAL HEALTH
AND PRODUCTION**

COURSE CODE: AHP 2105-1

COURSE TITLE: GENERAL PATHOLOGY

DATE: 13/12/2023

TIME: 1430-1630 HRS

INSTRUCTIONS TO CANDIDATES

Answer **ALL** questions in are **COMPULSORY**

This paper consists of 2 printed pages. Please turn over

- 1 a State the cells response to noxious chemical, physical, or biological agents. (8 marks)
- b Discuss the different types of necrosis. (10 marks)
- b Name two causes of enteritis. (2 marks)
- 2 a List the five (5) biochemical events that take place in the process of cell death. (5 marks)
- b Discuss the five (5) cardinal signs of inflammation and their manifestation in pathological reactions. (15 marks)
- 3 a With examples, state the difference between the following terms:
 - a) Cachexia and emaciation (4 marks)
 - b) Septicaemia and toxemia (4 marks)
 - c) Petechiae and sugginations (2 marks)
- b Discuss glycogen accumulation under the following sub-headings:
 - i Definition (1 marks)
 - ii Gross appearance (3 marks)
 - iii Pathogenesis (6 marks)
- 4 a Discuss possible outcomes of thrombosis (8 marks)
- b State any two characteristics of neoplasia. (2 marks)
- c Discuss the mechanisms of tumor spread in animals (10 marks)
- 5 a Discuss the difference among the following terms:
 - i Rigor mortis (4 marks)
 - ii Algor mortis (4 marks)
 - iii Livor mortis (2 marks)
- b Name any 5 commonly used fixatives in pathology and tissues recommended for fixation. (10 marks)
- 6 Discuss the collection and preservation of histopathological samples.
(20 marks)

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