

DEBRE MARKOS UNIVERSITY
COLLEGE OF AGRICULTURE AND NATURAL RESOURCE
PROGRAM: ANIMAL SCIENCE

Academic year 2019/20, Year 2, Semester II

Module identification

Course Title: *Animal Health and Disease Control*

Course Code: **VetM 3103**

Credit hour: **3**

Course ECTS: **5**

Target Group: *Animal Science Students*

Instructors contact information

Dr. Amsalu Misgie

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Course status-Core, Pre requisites: None

Student's Work Load	Lecture	Tutorial	Home Study	Assessment	Practice/field works	Group work	Total
	32	16	23	-	48	16	135

Description of the Course

Theory: The course deals with the health aspects of animal Production with regard to animal diseases and their prevention and control. It also describes some epidemiological concepts on the occurrence and distribution of the disease and factors incriminated for their occurrence. It involves classification of animal diseases and their general effect on the production and productivity. It gives emphasis to important infectious diseases in Ethiopian through systematic description of their etiology, mode of transmission, occurrence, pathogenesis, clinical signs, pathological finding, diagnosis, treatment and finally prevention and control of those diseases.

Practical: Clinical examination of individual animals (history talking, general physical examination, specific physical examination) and Clinical diagnosis at herd level. Collection and processing of microbiological, parasitological and histopathology samples. Measures used for the prevention and control of disease.

Learning outcomes

The main objective of the course is to introduce students to the basic concepts *Animal Health and Disease Control*. At the end of the course the students are expected to be able to:

- Identify various common diseases found in farm animals
- Design and implement an effective herd or flock health program which would include considerations for sanitation, nutritional disorders and vaccination programs;
- Evaluate various types of chemotherapy for the treatment of diseases outlined in item one;
- Design and implement a cost effective herd or flock health program

COURSE CONTENT

CHAPTER ONE: General Concepts of animal health

- Concept of disease (infection)
- Cause of disease and different stages of diseases
- Methods of disease transmission
- Methods of disease maintenance

CHAPTER TWO: Factors influencing disease occurrence (disease determinates)

- ❖ Factors associated with the host (Intrinsic factors)
 - Age, Sex, Immunity, Genetic factors, Species and breed and Stress
- ❖ Factors associated with disease causing agents (Extrinsic factors)
 - Virulence and pathogenicity
 - Host and agent interaction
- ❖ Environmental Factors (Extrinsic factors)
 - Physical factors: Climate (macroclimate: terrestrial and microclimate: biological)
 - Husbandry: Housing, Diet and Management

CHAPTER THREE: Major Animal Diseases Having Economic Importance in Ethiopia and the Tropics and Their Management

- ❖ Non infectious diseases
- ❖ Infectious diseases
- ❖ Parasitic Diseases

CHAPTER FOUR: Basic principles of disease prevention and control

- ◆ Definition of terminologies (prevention, control and others)
- ◆ Sanitation, Vaccination, Quarantine
- ◆ Isolation of sick animals.

CHAPTER FIVE: Laboratory Medicine

- Specimen Collection
- Specimen Preservation
- Specimen Submission
- Specimen Examination

Mode of delivery/Teaching and learning methods:

- ✚ The course will be offered through lecture method, group discussion, brainstorming and participatory teaching and learning approaches as well as reading assignments and short note provision

Course assessment techniques

- Quiz, assignment, test, final exam and other
- $\geq 50\%$ continuous and $\leq 50\%$ summative (Final Exam)

Course Policy

- **Preparedness:** Student should come to the class on time as well as with necessary materials
- **Participation:** class participation has its own value
- **Class/Practical Attendance:** Student who miss more than to 20% of the class will not sit on final exam
- **Plagiarism:** plagiarism will leads to “F” grade, Copying project and group work from other group project or work will lead to penalty.

References

- ✚ Radostits, O. M., Gay, C. C., Hinchcliff, K. W. and Constable, P. D. (2007): Veterinary Medicine: A Text Book of the Diseases of Cattle, Sheep, Goat, Pig and Horses. 10th Edition, Editors: Rodenhuis, J. and Demetriou-Swanwick, R., Saunders-Elsevier, Edinburgh Ltd.

- ✚ Textbook of Veterinary Internal Medicine Diseases of dogs and cat 2006thed. Volume 1
Stephen J. Ettinger and Edward C. Feldman.
- ✚ Koneman's Atlas and Textbook of Diagnostic Microbiology 6th edn. Washington W. Jr.
Stephen Allen, William Janda, Elmen Koneman, Paul Schrecken Berger and Gail Woods
2006: Kluwer Company.
- ✚ HALL, H.T.B. 1985. Diseases and parasites of livestock in the tropics. 5th edition.
- ✚ Blood, D.C and Handerson, J.A. 1974. Veterinary Medicine. Bailaliere Tindhall. London.
- ✚ Seifert, H.S.H. 1996. Tropical animal health. 2nd edition. Kluwer Academic Publishers.
The Netherlands.
- ✚ Merk veterinary manual (2006)

Approval section:

Prepared by instructor

Name: *Dr. Amsalu Misgie*

Signature _____

Date _____

Approved by department head

Name: _____

Signature _____

Date _____