

| Animal Health and Disease Control           |   |            |          |            |            |       |  |
|---|---|------------|----------|------------|------------|-------|--|
| Wollo University                            |   |            |          |            |            |       |  |
| School of Veterinary Medicine               |   |            |          |            |            |       |  |
| Program: Animal Science                     |   |            |          |            |            |       |  |
| Course Guide book/syllabus                  |   |            |          |            |            |       |  |
| Course Titles                               | Animal Health and Disease Control   |            |          |            |            |       |  |
| Course code                                 | Vetm 3103   |            |          |            |            |       |  |
| Course ECTS                                 | 5   |            |          |            |            |       |  |
| Course Information                          | <b>Target Group:</b> Second year Animal Science Students<br><b>Academic Year:</b> 2012 E.C (2019/2020 G.C.) <b>Semester:</b><br><b>Meeting Day</b> ----- <b>Meeting Time:</b> ----- <b>Meeting Location/Room</b> :-----   |            |          |            |            |       |  |
| Module Name                                 | Animal Disease and Veterinary Public Health   |            |          |            |            |       |  |
| Module No.                                  | 16  |            |          |            |            |       |  |
| Module Coordinator                          | <b>Name:-</b> Dr. Belege Tadesse <b>Phone No:</b> 0931201843<br><b>E-mail:</b> _____ <b>Office :</b> Block-_, Room_   |            |          |            |            |       |  |
| Instructor (s) Name and Contact Information | <b>Name</b> Dr. Yalelet Worku (DVM, MSc, Assis. professor of veterinary epidemiology)<br>Dr. Belege Tadesse (DVM, MSc, Assistant professor of veterinary epidemiology & Health economics)<br>_____ <b>Office :</b> Block-__, Room-__ <b>Phone :</b><br><b>Email :</b><br><b>Office hour:</b>  |            |          |            |            |       |  |
| ECTS  | 5   |            |          |            |            |       |  |
| Student's Work Load                         | Lecture   | Home Study | tutorial | laboratory | Group work | Total |  |
|   | 32  | 23         | 16       | 48         | 16         | 135   |  |
| Course Description                          | <p>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.</p> <p><b>Practical</b></p> <p>Clinical examination of individual animals (history talking, general physical examination, specific physical examination), Clinical diagnosis at herd level. Collection and processing of microbiological, and histopathology samples. Measures used for the prevention and control of disease.</p> |            |          |            |            |       |  |
| Learning Outcome                            | <p>At the end of this course, students will be able to;</p> <ul style="list-style-type: none"> <li>✓ Enable students to identify various common diseases found in farm animals</li> <li>✓ Enable students to know &amp; describe the major clinical</li> </ul>  |            |          |            |            |       |  |

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|                | signs of farm animal diseases in order to make clinical diagnosis at farm level   |   |                |
|                | ✓ Enable students to design and implement an effective herd or flock health program which would include considerations for sanitation, nutritional disorders, and vaccination program so as to give primary health aids to farm animals |   |                |
|                | ✓ Enable students to 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   |   |                |
|                | ✓ Enable students to understand how diseases arise and spread among susceptible population.   |   |                |
|                | ✓ Enable students to apply the different methods of livestock disease prevention and control strategies.  |   |                |
| Pre-requisites | None  |   |                |
| Course Status  | core  |   |                |
|                |   |   |                |
| Week           | Date of contact   | Topics/sub topics   | Reference book |
| W11            |   | <b>General Concepts of animal health</b><br><br>➤ Concept of disease (infection) and its importance<br><br>➤ Cause of disease and different stages of diseases<br><br><b>Factors influencing disease occurrence (disease determinates)</b><br><br><b>Factors associated with the host (Intrinsic factors)</b><br><br>➤ Age<br><br>➤ Sex<br><br>➤ Species and breed<br><br>➤ Genetic<br><br><b>Factors associated with disease causing agents (Extrinsic factors)</b><br><br>Virulence and pathogenicity |                |

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| W12 |  | <p><b>Environmental Factors (Extrinsic factors)</b></p> <ul style="list-style-type: none"> <li>➤ Physical factors: Climate (macroclimate &amp; microclimate)</li> <li>➤ Biological factors</li> <li>➤ Husbandry: Housing, Diet and Management</li> </ul> <p><b><u>Major Animal Diseases and their management</u></b></p> <p><b>Bacterial &amp; viral infectious diseases</b></p> <ul style="list-style-type: none"> <li>❖ Anthrax</li> <li>❖ Blackleg</li> <li>❖ Tetanus</li> <li>❖ Mastitis</li> <li>❖ Tuberculosis</li> <li>❖ Brucellosis</li> <li>❖ Shipping fever</li> <li>❖ CBPP &amp; CCPP</li> <li>❖ FMD</li> <li>❖ Newcastle disease</li> <li>❖ Fowl pox</li> </ul> |  |
| W13 |  | <p><b>Parasitic infectious diseases</b></p> <ul style="list-style-type: none"> <li>❖ Definitions, importance</li> <li>❖ Internal parasites (major diseases caused by round worms and tapeworms and also others)</li> <li>❖ External parasites (ticks, lice, fleas).</li> <li>❖ Mangelmites and flies</li> <li>❖ Diseases caused by protozoal parasites (trypanosomosis, coccidiosis and others)</li> </ul>  |  |
|     |  | <p><b>Non infectious diseases</b></p> <ul style="list-style-type: none"> <li>❖ Bloat</li> <li>❖ Hypocalcemia</li> <li>❖ Ketosis and acidosis</li> <li>❖ Vitamin Deficiencies (specifically in poultry)</li> <li>❖ Pregnancy toxaemia</li> <li>❖ Toxicosis (chemical, plant and others)</li> <li>❖ Trauma/wound, stress</li> </ul>   |  |

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| W14  |  | <b>Diagnosis of animal Diseases of economic importance in Ethiopia and the Tropics</b> <ul style="list-style-type: none"> <li>❖ Clinical Signs</li> <li>❖ Diagnosis</li> </ul> <b>Laboratory Medicine</b> <ul style="list-style-type: none"> <li>❖ Specimen Collection</li> <li>❖ Specimen Preservation</li> <li>❖ Specimen Submission</li> <li>❖ Specimen Examination</li> </ul> |  |
|  |  | <b>Final Exam week</b>  |  |
| <b>Mode of delivery/Teaching and learning methods:</b> The course will be offered through lecture method, group discussion, Buzz group, discussion, brainstorming and participatory teaching and learning approaches as well as reading assignments and short note provision |  |   |  |

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| <b>Assessment Methods</b><br><b>Continuous Assessment (&gt;=50%) &amp; Final Exam. (&lt;=50%)</b> | Assessment types  | Topics     | Schedule | Weight (%) |
|   | Sudden quiz   |            |          |            |
|   | Scheduled test  |            |          |            |
|   | Presentation  |            |          |            |
|   | Lab report  |            |          |            |
|   | Assignment  |            |          |            |
|   | Final exam  |            |          |            |
|   | Total   |            |          |            |
| <b>Course Polices</b>   | <b>Preparedness:</b> Should have to take principle of animal nutrition and pass   |            |          |            |
|   | <b>Participation:</b> Active class participation is mandatory which should be included in the final mark load for evaluation. |            |          |            |
|   | <b>Class attendance:</b> Missing 20% of total lecture hours will not admit student to set for final exam.                     |            |          |            |
|   | <b>Plagiarism:</b> Copying project and group work from other group project or work will lead to penalty.                      |            |          |            |
|   | <b>Grading System:</b>  |            |          |            |
|   | [90-100]  |            |          | A+         |
|   | [85-90)   |            |          | A          |
|   | [80-85)   | A- [75-80) | B+       |            |
|   | [70-75)   |            |          | B          |
|   | [65-70)   |            |          | B-         |
|   | [60-65)   |            |          | C+         |
|   | [50-60)   |            |          | C          |
| [45-50)   |   |            | C-       |            |
| [40-45)   |   |            | D        |            |
| [30-40)   |   |            | Fx       |            |
| [<30)   |   |            | F        |            |

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| <b>References</b>       | 1. Textbook of Veterinary Internal Medicine Diseases of dogs and cat<br>2000 6 <sup>th</sup> . edn. Volume1 Stephen J. Ettinger and Edward C. Feldman<br>2. Koneman's Atlas and Textbook of Diagnostic Microbiology 6 <sup>th</sup> edn.<br>Washington W. Jr. Stephen Allen, Wiliam Janda, Elmen Koneman, Paul<br>Schrecken Berger and Gail Woods 2006: Kluwer Company<br>3. Hall, H.T.B. 1985. Diseases and parasites of livestock in the tropics. 5th<br>edition.<br>4. Blood, D.C and Handerson, J.A. 1974. Veterinary Medicine. Bailaliere<br>Tindhall. London.<br>5. Seifert, H.S.H. 1996. Tropical animal health. 2nd edition. Kluwer<br>Academic Publishers. The Netherlands. |  |
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| <b>Approval section</b> | <b>Prepared by instructor</b><br><b>Name</b> _____<br><br><b>Signature</b> _____<br><br><b>Date:</b> _____   | <b>Approved by department head</b><br><b>Name</b> _____<br><b>Signature</b> _____<br><br><b>Date</b> _____ |