

| University   |   |                   |                         |                   |                   |              |
|--|---|-------------------|-------------------------|-------------------|-------------------|--------------|
| College of   |   |                   |                         |                   |                   |              |
| Program: Animal Science                            |   |                   |                         |                   |                   |              |
| Course Guide book/syllabus                         |   |                   |                         |                   |                   |              |
| <b>Course Titles</b>                               | <b>Food Hygiene and Veterinary Public Health</b>  |                   |                         |                   |                   |              |
| <b>Course code</b>                                 | <b>VetM 3104</b>  |                   |                         |                   |                   |              |
| <b>Course ECTS</b>                                 | <b>3</b>  |                   |                         |                   |                   |              |
| <b>Course Information</b>                          | <b>Target Group:</b><br><b>Academic Year:</b> ___ E.C (_____) <b>Semester:</b><br><b>Meeting Day</b> ----- <b>Meeting Time:</b> ----- <b>Meeting Location/Room</b><br>:-----  |                   |                         |                   |                   |              |
| <b>Module Name</b>                                 | <b>Animal Disease and Veterinary Public Health</b>  |                   |                         |                   |                   |              |
| <b>Module No.</b>                                  | <b>16</b>   |                   |                         |                   |                   |              |
| <b>Module Coordinator</b>                          | Name:- _____  |                   | Phone No: _____         |                   |                   |              |
|  | E-mail: _____   |                   | Office : Block-_, Room- |                   |                   |              |
|  | _____   |                   |                         |                   |                   |              |
| <b>Instructor (s) Name and Contact Information</b> | <b>Name:</b> _____<br><b>Office :</b> Block-_, Room-__<br><b>Phone :</b><br><b>Email :</b><br><b>Office hour:</b>   |                   |                         |                   |                   |              |
| <b>ECTS</b>  | <b>3</b>  |                   |                         |                   |                   |              |
| <b>Student's Work Load</b>                         | <b>Lecture</b>  | <b>Home Study</b> | <b>tutorial</b>         | <b>laboratory</b> | <b>Group work</b> | <b>Total</b> |
|  | <b>16</b>   | <b>13</b>         | <b>4</b>                | <b>48</b>         | <b>-</b>          | <b>81</b>    |
| <b>Course Description</b>                          | <p>Food hygiene and public health deals with food safety, contamination of food of animal origin with microbial and non microbial agents (residues), food preservation, transportation of slaughter animals, their management in the shelter, ante mortem and post mortem inspection of food animal, slaughtering methods, differentiation of caresses, construction of abattoirs, maintenance of hygiene in the abattoir quality control of poultry, eggs and fish, moreover, brief introduction is also given on the application of hazard analysis critical control point (HACCP) in the food chain, quantitative and qualitative risk analysis (RA). RA is applied to assess the ability of a given country to comply with the sanitary and phyto-sanitary requirements laid by the World Trade Organization.</p> <p><b>Practical</b></p> <ul style="list-style-type: none"> <li>• Collection of milk samples for chemical and bacteriological examination;</li> <li>• Detection of adulteration and detection of preservatives in milk;</li> </ul> |                   |                         |                   |                   |              |

|                        | <ul style="list-style-type: none"> <li>• Test for pasteurization;</li> <li>• Test of plant sanitation;</li> <li>• Bacteriological examination of raw and pasteurized milk, milk products and water for processing plant: <ul style="list-style-type: none"> <li>▪ S.P.C, coliform count,</li> <li>▪ faecal streptococcal count,</li> <li>▪ psychrophilic count,</li> <li>▪ mesophilic count,</li> <li>▪ thermophilic count,</li> </ul> </li> <li>• Preparation of concentrated, dehydrated , and fermented milk products;</li> <li>• Detection of adulteration in butter/ghee;</li> <li>• Isolation and identification of organisms of public health significance from milk and its products;</li> <li>• Mastitis and its Diagnosis;</li> <li>• Test of mastitic milk in relation to public health.</li> </ul> |   |                       |
|------------------------|--|---|-----------------------|
| <b>LearningOutcome</b> | <p>At the end of this course, students will be able to;</p> <ul style="list-style-type: none"> <li>☞ clearly understand, analyze and apply the principles food hygiene and veterinary public health practices</li> <li>☞ Elucidate major zoonotic diseases in the tropics their means of transmission, prevention and control options</li> <li>☞ design and implement an effective quality assurance practices</li> </ul>  |   |                       |
| <b>Pre-requisites</b>  | None   |   |                       |
| <b>Course Status</b>   | core   |   |                       |
| <b>Week</b>            | <b>Date of contact</b>   | <b>Topics/sub topics</b>  | <b>Reference book</b> |
| W14                    |  | <p><b>Introduction to Veterinary Public Health (VPH)</b></p> <p>Definition</p> <p>Duties and responsibilities of VPH at different levels</p> <p><b>Food Hygiene and principles of food preservation</b></p> <p>Criteria of food</p> |                       |

|     |  |   |  |
|-----|--|---|--|
|     |  | <p>Contamination of food</p> <p>Food spoilage</p> <p>Food borne infections and intoxications</p> <p>Food safety and Principles of food preservation</p> <p>Concepts and highlights of HACCP included</p>  |  |
| W15 |  | <p><b>Meat hygiene</b></p> <p>Introduction</p> <p>Meat hygiene</p> <p>Sources of meat</p> <p>Qualitative changes in meat</p> <p>Transportation of food animals and pre-slaughter care of food animals</p> <p>animal welfare issue also addressed</p> <p>Methods of slaughter and bleeding practices</p> <p>Abattoir</p> <p>Definition and types</p> <p>importance of constructing abattoir and slaughtering animals in slaughterhouses</p> <p>points considered in building abattoir</p> <p>Meat inspection</p> <p>Ante-mortem and post mortem inspection practices</p> <p>Fish and poultry hygiene</p> |  |
| W16 |  | <p><b>Milk hygiene</b></p> <p>Introduction</p> <p>Definition</p> <p>Composition of milk</p>   |  |

|   |  |   |  |
|---|--|---|--|
|   |  | <p>Physical properties of milk</p> <p>Microbial flora of milk and milk products</p> <p>Contamination of row milk</p> <p>Milk hygiene practice</p> <p>Milk processing and milk products</p> <p>Public Health significance of milk and milk products</p> <p>Quality control of milk and milk products</p> <p>Mastitis and its diagnosis</p> <p><b>Zoonoses</b></p> <p>Introduction</p> <p>Definition</p> <p>Types</p> <p>Classification of Zoonoses</p> <p>Mode of transmission</p> <p>Important Zoonotic Diseases of Tropics and sub-tropics</p> <p>Bacterial Zoonosis</p> <p>Viral Zoonosis</p> <p>Parasitic Zoonosis</p> <p>Public and Economic Importance of Zoonotic Diseases</p> <p>Prevention, Control and Eradication of Zoonotic diseases (there principles)</p> |  |
|   |  | <p><b>Final Exam week</b></p>   |  |
| <p><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</p> |  |   |  |

|   |   |        |          |            |          |    |         |   |         |    |         |    |         |   |         |    |         |    |         |   |         |    |         |   |         |    |       |   |
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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>   | <p><b>Preparedness:</b> Should have to take principle of animal nutrition and pass</p> <p><b>Participation:</b> Active class participation is mandatory which should be included in the final mark load for evaluation.</p> <p><b>Class attendance:</b> Missing 20% of total lecture hours will not admit student to set for final exam.</p> <p><b>Plagiarism:</b> Copying project and group work from other group project or work will lead to penalty.</p> <p><b>Grading System:</b></p> <table style="margin-left: 40px;"> <tr><td>[90-100]</td><td>A+</td></tr> <tr><td>[85-90)</td><td>A</td></tr> <tr><td>[80-85)</td><td>A-</td></tr> <tr><td>[75-80)</td><td>B+</td></tr> <tr><td>[70-75)</td><td>B</td></tr> <tr><td>[65-70)</td><td>B-</td></tr> <tr><td>[60-65)</td><td>C+</td></tr> <tr><td>[50-60)</td><td>C</td></tr> <tr><td>[45-50)</td><td>C-</td></tr> <tr><td>[40-45)</td><td>D</td></tr> <tr><td>[30-40)</td><td>Fx</td></tr> <tr><td>[&lt;30)</td><td>F</td></tr> </table> |        |          |            | [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 |
| [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   |        |          |            |          |    |         |   |         |    |         |    |         |   |         |    |         |    |         |   |         |    |         |   |         |    |       |   |
| <b>References</b>   | <p>Beef production: M. H. Cooper 2005 Chalwala Offset Printer, Growth, Development and body farms in cattle</p> <p>Dennis R. Burton. 2001. Antibodies in viral infection, 1st ed.</p> <p>Ellen Mazo. 2002. The immunology advantage, 1st ed.</p> <p>Frank C.Hay. 2002. Practical immunology, 4th ed.</p> <p>Kimball. 1986. Introduction to immunology, 2nd ed.</p> <p>M.D cooper. 2001. Activity and inhibitory immunoglobulin- like receptors, 1st ed</p>  |        |          |            |          |    |         |   |         |    |         |    |         |   |         |    |         |    |         |   |         |    |         |   |         |    |       |   |

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| <b>Approval section</b> | <b>Prepared by instructor</b><br><b>Name</b> _____<br><b>Signature</b> _____<br><b>Date:</b> _____ | <b>Approved by department head</b><br><b>Name</b> _____<br><b>Signature</b> _____<br><b>Date</b> _____ |
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