<table>
<thead>
<tr>
<th>DVM Semester</th>
<th>BRM Courses Integration</th>
<th>BRM Knowledge Level</th>
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<tbody>
<tr>
<td>Semester 1:</td>
<td><strong>No integration</strong></td>
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</table>
| Semester 2:  | • General Veterinary Microbiology *(Basic concepts of biosafety/biosecurity *BS&S in microbiology lab practical session)* | • Introduction to the BS&S, relevant terminologies and required examples *During* Lab practical  
  o 1 contact hour required |
|              | • General Veterinary Pathology *(Basic concepts on sample collection and sample transportation)* | • Basic sample collection and transportation concepts *During* the Practical session of tissue processing through adding dual use of research project ideas.  
  o 1 contact hour required  
  • Intro to BRM and basics AMP model  
  o 1 contact hour required |
| Semester 3:  | • Molecular Biology *(BRM intro – AMP model –basics only)* |                     |
|              | • Livestock Feed Resources and Forage Conservation *(BRM Risk Assessment, basics of hazards/threats identification and risk characterization process)* | • BRM Risk Assessment process with basic concepts of hazards/threats Identification and risk characterization *During* Theory session  
  o 1 contact hour required  
  • Basic intro to Good Lab Work Practices *GLWP and Personal Protective Equipment *PPE *During* Practical session  
  o 2 contact hours required  
  • Introduction to SOPs development and basic concepts of spill kits/Decontamination process *During* Practical session  
  o 1 hour contact hour required |
| Semester 4:  | • Veterinary Bacteriology and Mycology *(Basic concepts of Good Lab Work Practices *GLWP and Personal Protective Equipment *PPE)* |                     |
|              | • Systemic Veterinary Pathology *(Intro to SOPs development and Basic concepts of Decontamination process)* |                     |
| Semester 5:  | • Veterinary Clinical Pathology *(Risk Assessment –hazard/threats identification process and Risk communication)* | • Intermediate Risk assessment – hazards/threats identification process and Risk Communication *During* practical session  
  o 1 contact hour required |
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<th>Semester 6:</th>
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| • Veterinary Virology *(Intro to Biocontainment facilities)*  
• Islamic Studies/Ethics *(Bioethics)*  | • Introduction to the concept of risk group organisms, Biocontainment facilities and BSL levels *During* Theory and Practical session  
• 1 contact hour required  
• Introduction to the Bioethics Concepts *During* Theory session  
• 1 contact hour required  |
| Semester 6: |  |
| • Medicine Clinic-I *(Basic Field Biosecurity and Characterization of Waste Disposal)*  
• Theriogenology Clinic – I *(Animal health worker’s safety and security)*  
• Zoonoses and Food Safety *(Planning and Assessment- 6 topics from policy planning of BRM)*  
• Meat Inspection and Necropsy Practice *(Intro to PPE, Bio Waste management and disposal, Documentation and proper reporting for QA/QC)*  | • Introduction to the basics of Field Biosecurity and the characterization of biological wastes disposal *During* Clinical session  
• 1 contact hour required  
• Introduction to animal health worker’s safety and security *During* Clinical session  
• 1 contact hour required  
• Basic introduction to the concepts of BRM Planning and Assessment *During* Practical session  
• 1 contact hour required  
• Introduction to the concepts of PPE, Waste management system, Documentation and proper reporting for QA/QC in meat inspection and Necropsy practices.  
• 2 contact hours required  |
| Semester 7: |  |
| • Veterinary Preventive Medicine-II *(Developing need assessment and building Human capacity for BRM)*  
• Medicine Clinic-II *(Incident Management and Response)*  
• Theriogenology Clinic – II *(Evaluate Human performance for BRM in Lab)*  | • Introduction to Developing need assessment and building Human capacity for BRM *During* Theory session  
• 1 contact hour required  
• Introduction/demo to the concepts of Incident Management and response *During* Practical session  
• 1 contact hour required  |
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<table>
<thead>
<tr>
<th>Semester 8:</th>
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| • Beef and Mutton Production *(Developing SOPs for food processing facilities)* | • Human performance evaluation in BRM Lab *During* Theory and Practical  
  o 1 contact hour required  
| | • Developing biosafety SOPs for food processing facilities *During* Practical session  
  o 1 contact hour required  
| |  |
| Semester 8: |  |
| • Veterinary Epidemiology and Public Health *(BRM principles used in Epidemiology and Public Health field)* | • Introduction to BRM principles used in Epidemiology and Public Health Field *During* Theory session  
  o 1 contact hour required  
| | • Evaluating, measuring and improving overall BRM performance in clinic settings based on available standards *During* Practical session  
  o 1 contact hour required  
| |  |
| Semester 9: |  |
| • Medicine Clinic III *(Evaluating, measuring and improving overall BRM performance)* |  |
| |  |
| Semester 9: |  |
| • Poultry Pathology (Lab design principles for implementation of BRM) | • Basic introduction to the concepts of Lab design principles for implementation of BRM *During* Practical session  
  o 2 contact hour required  
| | • Basic/Preliminary introduction to the Administrative control for BRM *During* Clinics session  
  o 1 contact hour required  
| |  |
| Semester 10: |  |
| | **No integration**  

## Contact:

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