Veterinary Infectious Diseases Training Course

Professional Development Training Course Outline

Category	Veterinary and Animal Science	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Veterinary Infectious Diseases have emerged as one of the most critical challenges in animal health, directly impacting livestock productivity, companion animal wellbeing, and global public health. Veterinary Infectious Diseases Training Course is meticulously designed for veterinary professionals, epidemiologists, and animal health specialists to master the prevention, diagnosis, and management of infectious diseases in animals. Participants will gain cutting-edge insights into disease epidemiology, zoonotic potential, and advanced diagnostic techniques, ensuring preparedness against emerging pathogens.

The course emphasizes a practical, case-based learning approach, integrating the latest research, real-world outbreak investigations, and biosecurity strategies. Leveraging modern laboratory tools, molecular diagnostics, and data-driven surveillance, participants will develop actionable skills to mitigate disease risks, improve herd health, and contribute to sustainable animal husbandry practices. By combining theory with applied methodologies, this training empowers veterinary professionals to lead in animal disease control and public health protection.

Programme Curriculum

Veterinary Infectious Diseases Training Course

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Course Duration

5 days

Course Objectives

1. Understand epidemiology and transmission dynamics of major veterinary infectious diseases.
2. Master molecular and serological diagnostic techniques for rapid pathogen detection.
3. Implement biosecurity and infection control measures in animal populations.
4. Identify zoonotic risks and strategies for One Health integration.
5. Apply outbreak investigation protocols in real-world scenarios.
6. Develop vaccination strategies and herd immunity management plans.
7. Evaluate antimicrobial stewardship in veterinary practice.
8. Utilize data analytics and disease surveillance tools for predictive modeling.
9. Analyze case studies of emerging and re-emerging infectious diseases.
10. Formulate risk assessment and contingency plans for disease emergencies.
11. Enhance decision-making through evidence-based veterinary interventions.
12. Integrate clinical, laboratory, and field approaches for disease management.
13. Promote global animal health awareness and collaboration in infectious disease control.

Target Audience

1. Veterinarians and veterinary clinicians
2. Veterinary students and interns
3. Animal health researchers
4. Epidemiologists and public health professionals
5. Livestock and poultry farm managers
6. Laboratory diagnostic personnel
7. Government and regulatory animal health officers
8. NGO and community animal health workers

Course Modules

Module 1: Introduction to Veterinary Infectious Diseases

- Overview of bacterial, viral, fungal, and parasitic diseases
- Epidemiology and disease ecology
- Emerging and re-emerging pathogens
- Zoonoses and One Health approach
- Case Study: Foot-and-Mouth Disease outbreak management

Module 2: Diagnostic Techniques

- Serological assays (ELISA, agglutination)
- Molecular diagnostics (PCR, qPCR, sequencing)

- Rapid point-of-care tests
- Sample collection and handling best practices
- Case Study: Molecular diagnosis of avian influenza

Module 3: Disease Surveillance and Epidemiology

- Active and passive surveillance systems
- Geographic Information Systems (GIS) in disease mapping
- Predictive modeling and outbreak forecasting
- Risk assessment frameworks
- Case Study: Brucellosis prevalence mapping in livestock

Module 4: Biosecurity and Infection Control

- Farm-level biosecurity protocols
- Quarantine and movement control strategies
- Disinfection and sanitation techniques
- Personal protective equipment and safety measures
- Case Study: Swine fever prevention in commercial farms

Module 5: Vaccination and Herd Immunity

- Principles of immunology in veterinary practice
- Vaccine types and selection criteria
- Herd immunity calculation and management
- Cold chain management and storage
- Case Study: Canine parvovirus vaccination campaign

Module 6: Antimicrobial Stewardship

- Rational antibiotic use in animals
- Monitoring antimicrobial resistance trends
- Alternatives to antimicrobials (probiotics, vaccines)
- Policy and regulatory frameworks
- Case Study: Antimicrobial stewardship in dairy farms

Module 7: Outbreak Investigation and Crisis Management

- Steps of outbreak investigation
- Sample collection and laboratory coordination
- Reporting and communication protocols
- Containment and eradication strategies
- Case Study: Rabies outbreak response in rural areas

Module 8: Data Analytics and One Health Integration

- Disease data collection and management
- Statistical analysis for epidemiology
- Risk modeling and scenario planning
- Collaboration between animal, human, and environmental health sectors
- Case Study: One Health approach to zoonotic disease mitigation

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

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