MERCURY

Livestock Management & Animal Health

6 – 10 September 2027
Madrid (Spain)



Dubai - UAE: +971 4 450 5697
Istanbul - Türkiye: +90 539 599 1206
Amman - Jordan: +962 79 712 3347

Livestock Management & Animal Health

Ref: 16416_1019797 **Date:** 6 – 10 September 2027 **Location:** Madrid (Spain) **Fees:** 6200 Euro

Introduction:

The Livestock Management and Animal Health course equips participants with a holistic understanding of managing farm animals sustainably, ensuring their productivity, welfare, and disease resilience. This course covers the theoretical foundations of animal husbandry, nutrition, breeding strategies, preventative health protocols, and diagnostics in livestock species. Learners will explore frameworks for biosecurity, disease control, and integrated farm management.

This Livestock Management and Animal Health program emphasizes linking animal health principles to operational decision-making in real-world farm settings. Instructors will guide applications of modern techniques in disease surveillance, parasite control, and herd health. Participants will be able to reason strategically about livestock systems, anticipate health risks, and propose scientifically grounded interventions.

Targeted Groups:

This Livestock Management and Animal Health training targets professionals seeking specialized knowledge and skills:

- Veterinarians entering the livestock sector.
- Farm managers oversee animal operations.
- Extension officers and agricultural advisors.
- Animal production consultants.
- Graduate students in animal science.
- Policy makers in rural development.
- Feed and pharmaceutical industry staff.

Course Objectives:

Participants will achieve the following objectives by completing the Livestock Management and Animal Health course:

Dubai - UAE: +971 4 450 5697
Istanbul - Türkiye: +90 539 599 1206
Amman - Jordan: +962 79 712 3347

- Understand core principles of livestock management and animal health across species.
- Analyze nutritional requirements and design feeding programs based on life stage.
- Interpret disease processes, epidemiology, and control strategies in farm livestock.
- Formulate breeding and genetic improvement plans for herd/flock resilience.
- Integrate biosecurity measures and diagnostics into farm health protocols.
- Critically assess health risks and develop mitigation strategies in livestock systems.
- Apply decision frameworks to manage herd health in the context of farm economics.
- Communicate evidence-based recommendations for animal health to stakeholders.

Targeted Competencies:

Participants will gain the following competencies during the Livestock Management and Animal Health program:

- Ability to design and manage feeding and nutrition regimes for various livestock classes.
- Skill in diagnosing common livestock diseases and proposing control measures.
- Competence in planning breeding, herd health, and genetic improvement protocols.
- Capacity to develop biosecurity protocols and surveillance plans.
- Analytical skill to integrate animal health decisions with farm management and economics.
- Facility in interpreting veterinary diagnostic data and laboratory results.
- Confidence in advising farm teams or clients on health risk mitigation.
- Skill in structuring health plans tailored to species, region, and production goals.

Studying Scenarios:

In this Livestock Management and Animal Health training, participants will develop their skills through the analysis of the following scenarios:

- Dairy farm faces recurring mastitis outbreaks and seeks preventive health redesign.
- The sheep farm is experiencing anthelmintic resistance and must revise its parasite control strategy.
- A mixed cattle-goat operation aims to integrate breeding plans and disease screening.
- The swine unit faces the introduction of viral diseases and must develop a biosecurity plan.
- Poultry farms report mortality spikes and need to diagnose probable causes.
- The pastoral system must adopt precision livestock monitoring methods to improve animal health.
- A remote farm region requires planning for veterinary outreach and emergency care.

Dubai - UAE: +971 4 450 5697
Istanbul - Türkiye: +90 539 599 1206
Amman - Jordan: +962 79 712 3347

MERCURY

Course Content:

Unit 1: Foundations of Livestock Management & Animal Health:

- Overview of livestock systems and classification dairy, beef, small ruminants, and poultry.
- Historical and contemporary roles of farm animals in food systems.
- Core concepts in animal husbandry: housing, handling, welfare, and stress reduction.
- Introduction to livestock management principles and sustainability.
- Role of environmental factors climate, water, ventilation in animal health.
- Relationship between health, productivity, and profitability.
- Use of precision livestock farming tools sensors, monitoring, data.

Unit 2: Nutrition, Feeding & Feed Management:

- Principles of digestion and metabolism in ruminants and monogastrics.
- Nutrient requirements by species, age, and production stage.
- Feed formulation strategies include ration balancing, additives, and mineral supplementation.
- Forage, pasture, fodder conservation, and silage techniques.
- Feed quality assessment, anti-nutritional factors, and feed safety.
- Key considerations: Include Delivery systems, feeding frequency, and monitoring consumption.
- Interaction of Nutrition with Health: Immunity, Metabolic Disease.

Unit 3: Breeding, Genetics & Reproduction in Livestock:

- Reproductive physiology, estrus, and fertility monitoring.
- Genetic selection and breeding goals for resilience and health.
- Artificial insemination, embryo transfer, and assisted reproduction.
- Pregnancy diagnosis and parturition management.
- Neonatal care, colostrum management, and weaning strategies.
- Reproductive disorders, infertility diagnosis, and correction.
- Breed choice, crossbreeding, and adaptation traits.

Unit 4: Diseases, Diagnostics & Biosecurity:

- Classification of infectious viral, bacterial, fungal, parasitic and non-infectious diseases.
- Epidemiology, disease transmission, and outbreak investigation.
- Clinical signs, sampling, laboratory diagnostics, and interpretation.
- Vaccine strategies, immunization schedules, and herd immunity.
- Biosecurity design: quarantine, sanitation, traffic control.
- Antimicrobial stewardship and resistance management.
- Zoonoses, public health interface, and regulatory compliance.

Dubai - UAE: +971 4 450 5697
Istanbul - Türkiye: +90 539 599 1206
Amman - Jordan: +962 79 712 3347

Unit 5: Herd Health Planning, Monitoring & Decision Support:

- Herd health program design: goals, protocols, schedules.
- Health monitoring: record keeping, KPIs, mortality & morbidity tracking.
- Risk assessment tools and decision support systems.
- Economic integration: cost-benefit of health interventions.
- Crisis management: outbreak response, contingency planning.
- Extension, stakeholder communication, compliance, and audit.
- Leveraging precision livestock health tools and predictive analytics.

Final Insights & Key Takeaways:

This course enables participants to bridge livestock management strategies with animal health principles for sustainable production. Graduates will confidently design herd health systems that align productivity, welfare, and disease control.