Antibiotic Resistance & Stewardship 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

Antibiotic Resistance & Stewardship Training Course is designed to address the escalating global threat of Antimicrobial Resistance, Multidrug-Resistant Organisms, and Healthcare-Associated Infections. With rising cases of Carbapenem-Resistant Enterobacteriaceae, MRSA, and ESBL-producing pathogens, healthcare systems worldwide are under immense pressure to implement robust Antimicrobial Stewardship Programs. This course equips healthcare professionals with cutting-edge strategies in Precision Prescribing, Infection Prevention & Control, Surveillance Systems, and One Health Approach, aligning with WHO Global Action Plan on AMR and CDC stewardship frameworks.

Through an integrated learning model combining Clinical Decision Support Systems, Data-Driven Stewardship, Pharmacokinetic/Pharmacodynamic Optimization, and Rapid Diagnostic Technologies, participants will develop practical competencies to combat inappropriate antibiotic use, reduce resistance rates, and improve patient safety outcomes. Emphasis is placed on Evidence-Based Medicine, Antibiotic De-escalation Protocols, Behavioral Change Interventions, and Digital Health Innovations, ensuring participants can implement measurable, sustainable stewardship solutions in hospitals, primary care, and community health settings.

Programme Curriculum

Antibiotic Resistance & Stewardship Training Course

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Course Duration

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Course Objectives

1. Strengthen knowledge of Global Antimicrobial Resistance (AMR) Trends & Surveillance Data.
2. Implement Antimicrobial Stewardship Programs (ASP) Frameworks effectively.
3. Apply Pharmacokinetics/Pharmacodynamics (PK/PD) Optimization Strategies.
4. Utilize Rapid Molecular Diagnostics & Point-of-Care Testing (POCT).
5. Integrate Clinical Decision Support Systems (CDSS) into prescribing workflows.
6. Promote Evidence-Based Antibiotic Prescribing Guidelines.
7. Develop Antibiotic De-escalation & IV-to-PO Switch Protocols.
8. Monitor and reduce Healthcare-Associated Infections (HAIs).
9. Implement Data-Driven Surveillance & Resistance Mapping Tools.
10. Strengthen Infection Prevention & Control (IPC) Compliance Audits.
11. Apply the One Health Approach to Zoonotic & Environmental AMR.
12. Design Behavioral Change & Prescriber Accountability Interventions.
13. Evaluate outcomes using Quality Improvement (QI) & Patient Safety Metrics.

Target Audience

1. Infectious Disease Specialists
2. Clinical Pharmacists & PharmD Professionals
3. Microbiologists & Laboratory Scientists
4. Hospital Administrators & Quality Managers
5. ICU Physicians & Internal Medicine Doctors
6. Nurses & Infection Control Practitioners
7. Public Health Professionals
8. Healthcare Policy Makers & Regulatory Authorities

Course Modules

Module 1: Foundations of Antimicrobial Resistance

- Global AMR Burden & WHO Action Plan
- Mechanisms of Resistance (ESBL, CRE, MRSA)
- Antibiotic Pipeline & Innovation Gaps
- One Health Perspective

- **Case Study:** CRE outbreak management in tertiary hospital

Module 2: Principles of Antimicrobial Stewardship

- Core Elements of ASP
- Leadership Commitment & Accountability
- Stewardship Policy Development
- Multidisciplinary Team Roles
- **Case Study:** Implementing ASP in a 300-bed hospital

Module 3: Clinical Prescribing Optimization

- Empiric vs Targeted Therapy
- PK/PD Optimization & Dose Adjustment
- IV-to-Oral Switch Strategy
- De-escalation Protocols
- **Case Study:** Reducing broad-spectrum antibiotic misuse in ICU

Module 4: Rapid Diagnostics & Technology Integration

- Molecular Diagnostics & PCR Testing
- Biomarkers (Procalcitonin, CRP)
- Clinical Decision Support Systems (CDSS)
- AI in Predictive Resistance Modeling
- **Case Study:** Reducing turnaround time with rapid diagnostics

Module 5: Infection Prevention & Control (IPC)

- Hand Hygiene Compliance
- Environmental Decontamination
- Isolation Precautions
- HAI Surveillance Systems
- **Case Study:** MRSA containment in surgical ward

Module 6: Data-Driven Stewardship & Surveillance

- Resistance Mapping & Trend Analysis
- Antibiograms & Reporting
- Electronic Health Records (EHR) Integration
- KPI & QI Metrics
- **Case Study:** Data dashboard implementation for stewardship monitoring

Module 7: Behavioral & Policy Interventions

- Prescriber Behavior Change Models
- Education & Awareness Campaigns
- Policy & Regulatory Frameworks
- Community Engagement Strategies
- **Case Study:** National antibiotic awareness campaign impact

Module 8: Implementation, Monitoring & Sustainability

- Audits & Feedback Mechanisms

- ROI of Stewardship Programs
- Continuous Quality Improvement (CQI)
- Sustainability & Capacity Building
- **Case Study:** Sustaining ASP impact over 5 years

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
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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