

LAPT

LONDON ACADEMY OF PROFESSIONAL TRAINING

CERTIFICATE

Adv Certificate in Clinical Support & Lab Procedures

Practitioner Level



LAPT — London Academy of Professional Training

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Reference PC-VSC-P • Petcare Centres

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AT A GLANCE

REFERENCE	PC-VSC-P
AWARD	Certificate
ASSESSMENT	445 marks — 267 to pass (60%)
PREREQUISITES	None
VALIDITY	Lifetime
AWARDING BODY	LAPT — London Academy of Professional Training

CURRICULUM

1

Advanced Laboratory Techniques

5 chapters · 30 classes 90 marks

• 1 Understanding Laboratory Safety and Regulations in Veterinary Practice — 6 classes

› 1.1 Comprehending Veterinary Laboratory Safety Fundamentals

› 1.2 Identifying Common Laboratory Hazards in Veterinary Settings

› 1.3 Understanding and Implementing PPE Protocols for Veterinary Labs

› 1.4 Navigating Regulations and Compliance in Veterinary Laboratories

› 1.5 Developing Risk Assessment Strategies for Veterinary Procedures

› 1.6 Applying Emergency Procedures and Incident Handling in Lab Environments

• 2 Collection and Handling of Veterinary Samples — 6 classes

› 2.1 Understanding the Types of Veterinary Samples

› 2.2 Mastering Sample Collection Techniques for Various Animals

› 2.3 Ensuring Correct Labelling and Documentation of Samples

› 2.4 Exploring Proper Sample Storage and Preservation Methods

› 2.5 Handling Potential Contaminants and Ensuring Sample Integrity

› 2.6 Applying Knowledge: Real-Life Scenarios in Sample Collection and Handling

• 3 Analytical Techniques in Veterinary Hematology — 6 classes

› 3.1 Explore Blood Collection Techniques in Veterinary Settings

› 3.2 Understand Cell Counting and Identification Methods

› 3.3 Apply Staining Techniques for Hematological Analysis

› 3.4 Conduct Differential Blood Count Procedures

› 3.5 Analyze Hematological Data for Diagnosis

› 3.6 Utilize Quality Control in Hematology Labs

• 4 Microbiological Testing and Diagnostic Procedures — 6 classes

› 4.1 Understanding Microorganisms: Characteristics and Classification

› 4.2 Preparing Samples: Techniques for Microbiological Investigation

› 4.3 Culturing Methods: Growing Bacterial and Fungal Specimens

› 4.4 Identifying Pathogens: Biochemical and Molecular Techniques

› 4.5 Conducting Sensitivity Tests: Antibiotic and Antimicrobial Susceptibility

› 4.6 Interpreting Results: Diagnostic Decision-Making in Clinical Microbiology

• 5 Advanced Biochemical and Molecular Laboratory Techniques — 6 classes

› 5.1 Understanding Biochemical and Molecular Lab Safety Protocols

› 5.2 Mastering Use of Advanced Analytical Instruments

› 5.3 Implementing Techniques for Protein and Nucleic Acid Isolation

› 5.4 Conducting Advanced Spectroscopic and Chromatographic Analysis

› 5.5 Applying Quantitative PCR for Molecular Diagnostics

› 5.6 Analyzing Results and Troubleshooting Common Laboratory Issues

• 1 Fundamentals of Veterinary Anaesthesia — 6 classes

- › 1.1 Understanding the Principles of Veterinary Anaesthesia
- › 1.2 Identifying and Selecting Anaesthetic Agents
- › 1.3 Monitoring Anaesthetic Depth and Patient Vital Signs
- › 1.4 Managing Anaesthetic Equipment and Machinery
- › 1.5 Administering Analgesia: Techniques and Protocols
- › 1.6 Ensuring Recovery: Post-Anaesthetic Care and Complications

• 2 Pharmacology of Anaesthetic and Analgesic Agents — 6 classes

- › 2.1 Understanding the Basics of Anaesthetic Agents
- › 2.2 Exploring Pharmacokinetics and Pharmacodynamics
- › 2.3 Identifying Different Classes of Anaesthetics
- › 2.4 Investigating Analgesic Agent Mechanisms
- › 2.5 Evaluating Drug Interactions in Anaesthesia
- › 2.6 Applying Dosage Calculations for Safe Administration

• 3 Monitoring and Managing Anaesthesia — 6 classes

- › 3.1 Understanding Anaesthetic Agents and Their Effects
- › 3.2 Preparing and Calibrating Monitoring Equipment
- › 3.3 Interpreting Vital Signs During Anaesthesia
- › 3.4 Implementing Analgesia Protocols
- › 3.5 Responding to Anaesthetic Emergencies
- › 3.6 Evaluating Patient Recovery and Follow-up Care

• 4 Anaesthesia in Special Cases and Species — 6 classes

- › 4.1 Understanding Anaesthesia in Geriatric Patients
- › 4.2 Managing Anaesthesia in Pediatric Cases
- › 4.3 Adapting Anaesthetic Techniques for Exotic Animal Species
- › 4.4 Administering Anaesthesia for Pregnant and Lactating Animals
- › 4.5 Evaluating Risks and Adjustments in Obese Patients
- › 4.6 Tailoring Analgesic Approaches for Different Species

• 5 Pain Assessment and Postoperative Analgesia — 6 classes

- › 5.1 Understanding Pain Pathways and Responses
- › 5.2 Identifying and Evaluating Pain in Patients
- › 5.3 Implementing Pain Assessment Tools and Techniques
- › 5.4 Exploring Pharmacological Interventions for Postoperative Pain
- › 5.5 Utilizing Non-Pharmacological Pain Management Strategies
- › 5.6 Creating Personalized Postoperative Analgesic Plans

• 1 Understanding Veterinary Clinical Support Roles — 6 classes

- › 1.1 Exploring Veterinary Clinical Support Roles
- › 1.2 Identifying Key Responsibilities in Veterinary Settings
- › 1.3 Differentiating Between Clinical Support Roles
- › 1.4 Understanding Ethical and Legal Considerations
- › 1.5 Utilizing Communication Skills in Clinical Support
- › 1.6 Applying Clinical Support Skills in Veterinary Practice

• 2 Foundational Animal Anatomy & Physiology — 6 classes

- › 2.1 Explore Basic Animal Cell Structures
- › 2.2 Understand Tissue Types and Functions
- › 2.3 Examine Major Organ Systems in Animals
- › 2.4 Identify Key Elements of Animal Physiology
- › 2.5 Analyze Comparative Anatomy Across Species
- › 2.6 Apply Anatomical Knowledge to Clinical Scenarios

• 3 Basics of Veterinary Diagnostic Procedures — 6 classes

- › 3.1 Understanding the Role of Diagnostics in Veterinary Care
- › 3.2 Identifying Common Veterinary Diagnostic Tools
- › 3.3 Exploring Blood Sample Collection Techniques
- › 3.4 Analyzing Diagnostic Imaging Procedures
- › 3.5 Interpreting Laboratory Test Results in Veterinary Settings
- › 3.6 Applying Diagnostic Protocols in Clinical Practice

• 4 Safe Handling and Care of Veterinary Equipment — 6 classes

- › 4.1 Understanding Veterinary Equipment Categories
- › 4.2 Identifying and Preventing Equipment Hazards
- › 4.3 Mastering Techniques for Safe Equipment Handling
- › 4.4 Implementing Sterilization and Cleaning Protocols
- › 4.5 Maintaining Equipment for Optimal Performance
- › 4.6 Applying Safety Standards in Veterinary Settings

• 5 Effective Communication and Record Keeping in Clinical Settings — 6 classes

- › 5.1 Understanding the Basics of Clinical Communication
- › 5.2 Identifying Barriers to Effective Communication in Clinical Settings
- › 5.3 Applying Active Listening Techniques with Patients and Colleagues
- › 5.4 Mastering Non-Verbal Communication Skills in Healthcare
- › 5.5 Implementing Accurate Record Keeping Practices
- › 5.6 Ensuring Confidentiality and Data Protection in Clinical Records

• 1 Understanding the Role of Clinical Support in Veterinary Care — 6 classes

- › 1.1 Exploring the Fundamentals of Veterinary Clinical Support
- › 1.2 Identifying Key Responsibilities in Veterinary Clinical Support
- › 1.3 Understanding Communication within a Veterinary Team
- › 1.4 Analyzing Ethical Considerations in Veterinary Care
- › 1.5 Implementing Best Practices for Laboratory Procedures
- › 1.6 Evaluating the Impact of Clinical Support on Patient Outcomes

• 2 Principles of Animal Handling and Safety — 6 classes

- › 2.1 Understanding the Fundamentals of Animal Behavior
- › 2.2 Identifying and Assessing Risk Factors in Animal Handling
- › 2.3 Mastering Safe Approaches and Techniques for Animal Handling
- › 2.4 Implementing Safety Protocols in Clinical Environments
- › 2.5 Applying Proper Use of Restraint Devices and Equipment
- › 2.6 Evaluating and Reporting Animal Handling Incidents

• 3 Laboratory Procedures and Diagnostics — 6 classes

- › 3.1 Understanding Laboratory Safety Protocols
- › 3.2 Identifying Common Laboratory Equipment
- › 3.3 Preparing Specimens for Diagnostics
- › 3.4 Conducting Basic Diagnostic Tests
- › 3.5 Interpreting Laboratory Test Results
- › 3.6 Ensuring Quality Control in Test Procedures

• 4 Effective Communication Skills in Clinical Settings — 6 classes

- › 4.1 Understanding the Fundamentals of Clinical Communication
- › 4.2 Identifying Barriers to Effective Communication in Healthcare
- › 4.3 Developing Active Listening Skills in Clinical Environments
- › 4.4 Implementing Patient-Centric Communication Strategies
- › 4.5 Managing Non-Verbal Cues and Body Language in Clinical Interactions
- › 4.6 Practicing Conflict Resolution and Negotiation in Clinical Settings

• 5 Professional Ethics and Continuous Development — 6 classes

- › 5.1 Understanding Professional Ethics in Clinical Support
- › 5.2 Exploring Ethical Decision-Making in Clinical Environments
- › 5.3 Analyzing Case Studies: Ethical Dilemmas in Clinical Practice
- › 5.4 Applying Ethical Principles to Daily Clinical Tasks
- › 5.5 Embracing Continuous Professional Development
- › 5.6 Strategizing Personal Growth in Clinical Support Roles

• 1 Fundamentals of Veterinary Radiology — 6 classes

- › 1.1 Understanding the Basics of Veterinary Radiology
- › 1.2 Identifying Common Equipment in Veterinary Radiology
- › 1.3 Learning Radiation Safety and Protection Procedures
- › 1.4 Positioning Techniques for Accurate Radiographic Imaging
- › 1.5 Analyzing Normal versus Abnormal Radiographic Findings
- › 1.6 Applying Radiology Techniques to Diagnostic Procedures

• 2 Understanding Diagnostic Imaging Techniques — 6 classes

- › 2.1 Explore the Fundamentals of Diagnostic Imaging
- › 2.2 Understand X-Ray Imaging Principles and Safety
- › 2.3 Identify Applications and Limitations of Ultrasound
- › 2.4 Learn the Basics of CT and MRI Technology
- › 2.5 Discover the Uses of Nuclear Medicine in Diagnostics
- › 2.6 Apply Imaging Techniques to Clinical Case Studies

• 3 Radiographic Anatomy and Interpretation — 6 classes

- › 3.1 Understanding Radiographic Anatomy: Key Structures and Landmarks
- › 3.2 Identifying Normal Variations in Radiographic Images
- › 3.3 Analyzing Common Pathologies in Radiographic Imaging
- › 3.4 Techniques for Enhanced Image Interpretation
- › 3.5 Applying Systematic Approaches in Radiographic Evaluation
- › 3.6 Interpreting Complex Cases: Integrated Diagnostic Strategies

• 4 Advanced Imaging Procedures and Protocols — 6 classes

- › 4.1 Understanding Advanced Imaging Modalities
- › 4.2 Interpreting Complex Radiographic Images
- › 4.3 Ensuring Safety in Advanced Imaging Procedures
- › 4.4 Mastering Protocols for Specialized Imaging
- › 4.5 Analyzing Case Studies of Rare Imaging Findings
- › 4.6 Implementing Protocols in Clinical Practice

• 5 Quality Control and Image Analysis in Clinical Practice — 6 classes

- › 5.1 Understanding Quality Standards in Radiology
- › 5.2 Identifying Common Imaging Artifacts
- › 5.3 Implementing Quality Control Measures
- › 5.4 Analyzing Image Clarity and Resolution
- › 5.5 Interpreting Diagnostic Imaging Results
- › 5.6 Applying Quality Improvement Strategies in Imaging

• 1 Fundamentals of Veterinary Pharmacology — 6 classes

- › 1.1 Understanding Drug Mechanisms in Veterinary Medicine
- › 1.2 Identifying Common Veterinary Drug Classes
- › 1.3 Exploring Pharmacokinetics in Animals
- › 1.4 Analyzing Pharmacodynamics: Effects on Animal Physiology
- › 1.5 Investigating Drug Safety and Adverse Reactions in Animals
- › 1.6 Applying Therapeutic Drug Monitoring in Veterinary Practice

• 2 Pharmacokinetics and Pharmacodynamics in Animals — 6 classes

- › 2.1 Understanding Pharmacokinetics: Exploring Drug Absorption and Distribution in Animals
- › 2.2 Examining Metabolism: Pathways and Factors Affecting Drug Breakdown in Animals
- › 2.3 Investigating Excretion: Mechanisms of Drug Elimination in Animal Physiology
- › 2.4 Analyzing Pharmacodynamics: Mechanisms of Drug Action and Response in Animal Systems
- › 2.5 Evaluating Dose-Response Relationships: Understanding Drug Efficacy and Potency in Animals
- › 2.6 Applying concepts: Case Studies in Veterinary Pharmacokinetics and Pharmacodynamics

• 3 Drug Administration Techniques in Veterinary Practice — 6 classes

- › 3.1 Understanding Drug Administration Routes
- › 3.2 Preparing and Measuring Veterinary Medications
- › 3.3 Mastering Oral Administration Techniques
- › 3.4 Applying Injectable Administration Procedures
- › 3.5 Safely Administering Topical Medications
- › 3.6 Evaluating Drug Administration Outcomes in Animals

• 4 Clinical Applications of Veterinary Pharmaceuticals — 6 classes

- › 4.1 Introduction to Veterinary Pharmaceuticals
- › 4.2 Understanding Pharmacokinetics in Animals
- › 4.3 Exploring Pharmacodynamics for Effective Treatment
- › 4.4 Analyzing Drug Interactions in Veterinary Practice
- › 4.5 Evaluating Dosage and Administration in Animals
- › 4.6 Applying Ethical Considerations in Veterinary Pharmacology

• 5 Emerging Trends in Veterinary Pharmacology — 6 classes

- › 5.1 Understanding Veterinary Pharmacokinetics in Emerging Treatments
- › 5.2 Exploring New Drug Classes in Veterinary Medicine
- › 5.3 Evaluating Advances in Veterinary Drug Delivery Systems
- › 5.4 Analyzing the Impact of Pharmacogenomics on Animal Treatment Plans
- › 5.5 Investigating the Role of Biologics in Veterinary Practice
- › 5.6 Applying Innovative Therapies in Veterinary Pharmacology