ARTEL®

Pipette Quality Management Certification

Syllabus

Day One

Part I – Pipettes in the Laboratory Overview

- Understand the mechanics of pipettes
- Identify causes of pipette failure
- Define guidelines on calibration frequency, number of data points, and tolerance limits
- Assess the need for operator training with guidelines for training and testing

Part II – Mitigating Pipette Operator Variability

- Perform "as-found" operator proficiency evaluation
- Participate in hands-on, standardized technique training session
- Apply new skills in a post-training practical exam

Part III – Ergonomics

- Recognize risk factors, sources of stress, common problems
- Participate in hands-on, standardized technique training session
- Identify solutions for reducing ergonomic injuries

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Day Two

Part IV – Regulations and Compliance

- Review industry standards, clinical standards
- Discuss GMP/GLP regulations
- Learn more about traceability, ISO 17025 accreditation, and new compliance issues

Part V – Pipette Repair and Maintenance

- Become familiar with different pipette models
- Learn about procedures for maintenance and repair of air displacement piston pipettes
- Conduct pipette maintenance on sample pipettes

Part VI – Best Practices in Pipetting Viscous Solutions

- Overview
- Measuring Viscous Solutions
- Viscous Solutions Pipetting tips

Part VII – Calibration Technologies

- Review pipette calibration methods
- Discuss best practices for pipette calibration

Part VIII – Setting up a Quality Assurance Program

- Explore laboratory best practices
- Determine recommendations and guidance for calibration frequency
- Evaluate case studies and participate in group discussions

Part IX – Multichannel Pipetting Technique Certification

- Understand issues associated with multichannel pipettes
- Perform "as-found" operator proficiency evaluation
- Participate in hands-on standardized technique training
- Apply new skills in a post-training practical exam

Part X – Artel Product Overview and Use

- PCS Pipette Calibration System & software
- MVS Multichannel Verification System

Conclusion – Medal Awards, Evaluation, and Certificate Presentation