



Liquid Handling Quality Assurance Training

Hands-on Training and Certification Utilizing the Artel® Method

Level 1

Pipetting Proficiency Certification

The pipette is a reliable precision instrument that has been used and trusted for many years. However, as with many forms of instrumentation, a pipette will perform only as well as the operator's technique allows.

Differences in technique greatly alter delivery volumes. As the demand for accuracy and precision increases in the laboratory, the importance of understanding and developing optimal, standardized pipetting technique becomes imperative.

This seminar is designed to meet the needs of all laboratorians who use pipettes in their daily tasks. Topics include:

Pipettes in the Laboratory Overview

- Understand the mechanics of pipettes
- Identify the 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

Pipette Ergonomics

- Recognize risk factors, sources of stress, common problems
- Discuss laboratory and work station design

Mitigating Pipette Operator Error

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

Optional topics:

Pipette Repair & Maintenance Multichannel Pipetting Certification



Level 2

Pipette Quality Management Certification

In recognition of heightened regulatory compliance and the need to improve internal processes for managing pipettes in the laboratory, these seminars are designed to meet the needs of all laboratorians who use pipettes daily, but who also have the task of understanding regulatory requirements and/or establishing an internal quality assurance program for their pipettes.

This seminar includes all topics and exams listed in the Level 1 Pipetting Proficiency Certification seminar, as well as the following topics:

Pipette Repair & Maintenance

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

Diagnosing Pipette Failures

- Learn how to troubleshoot pipette failures
- Become familiar with common pipette performance issues
- Discuss adjustment versus repair/maintenance

Calibration Technologies

- Review pipette calibration methods
- Discuss "Best Practices" for pipette calibration

Regulations & Compliance

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

Setting up a Quality Assurance Program

- Explore laboratory "Best Practices"
- Determine recommendations & guidelines for calibration frequency
- Evaluate case studies and participate in group discussions

PLUS —

Single & Multichannel Pipetting Technique Certification



more on reverse

Who Should Attend

- Laboratory Technicians and Technologists
- Laboratory Managers and Supervisors
- Quality Specialists
- Metrology Professionals and Calibration Specialists
- Training Managers and Analysts
- Regulatory Compliance Managers
- Research Scientists, Analysts, and Assistants
- Forensic Technologists

To learn more

www.artel-usa.com/viewtraining.aspx

To register

Level 1

Contact Artel at 888-406-3463

Level 2

www.artel-usa.com/registration.aspx

Questions?

Toll-free: 888-406-3463

Email: orders@artel-usa.com

The Artel® Method



Artel is the global technology leader in ultra-low volume liquid delivery measurement and quality assurance. Through years of experience, Artel has developed the Artel Method, a curriculum for improving pipetting proficiency that has come to be highly respected among laboratory professionals throughout the country.

Participants in the training program receive a *Certificate of Participation* which serves as documentation of training received in pipetting technique.

Trainees who successfully pass the written and practical exams receive an *Artel Certificate of Proficiency* and a Gold, Silver or Bronze medal for pipetting excellence.



Upcoming Seminars

Level 1 (One-day seminar at your facility) Pipetting Proficiency Certification

To schedule a Level 1 seminar at your facility, contact Artel at **888-406-3463**.

Level 2 (Two-day seminar in Westbrook, Maine) Pipette Quality Management Certification