

Pipetting Proficiency Certification

Syllabus



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
- Identify causes of pipette failure
- Apply new skills in a post-training practical exam



Part III – Ergonomics

- Recognize risk factors, sources of stress, common problems
- Discuss laboratory and workstation design
- Identify solutions for reducing ergonomic injuries



Part IV – Written Test Covering the Day’s Topics

Optional Modules



Viscous Solutions Pipetting Technique Certification (Single Channel)

- Contrast the key differences in pipetting aqueous versus viscous solutions
- Identify how to select the proper pipette system when working with viscous solutions
- Recognize the impact of proper pipetting techniques
- Participate in standardized hands-on technique training
- Apply new skills in a post training practical exam



Multichannel Pipetting Technique Certification

- Comprehend challenges associated with multichannel pipettes
- Perform “as-found” operator proficiency evaluation
- Participate in standardized hands-on technique training
- Apply new skills in a post training practical exam



Pipette Repair and Preventive Maintenance

- Become familiar with the inner workings of various pipette models
- Learn about procedures for maintenance and repair of air displacement piston pipettes
- Conduct pipette maintenance on single channel pipettes