



Introduction to Microbiology: Hands-On Sessions

The earner of this badge demonstrated understanding of microbiology concepts including light microscopy, aseptic technique, serial dilutions and plating, enrichment cultures and selective medias, and pure cultures and streak plating. The earner of this badge has completed all online portions before doing hands-on assessments.

Earner:		Supervisor:		Date:	
Earning Criteria	The earner has watched a minimum of 1 video and taken 1 quiz over each given topic. The earner must earn 100% on all accompanying quizzes before doing the hands-on portion described here. The earner then demonstrates the ability to work safely in the lab given each skill. The earner is finally assessed using a cumulative in-person assessment demonstrating their ability to perform all techniques.				
Reviewing Criteria	The supervisor will use the provided checklist to assess the earner's aseptic technique and microbial techniques– please use the space at the bottom of the checklist and/or the comments section to provide feedback for the earner.				
Scoring Criteria	Earner must get a “Yes” in all categories to earn the badge.				
				Yes	No
Skills Assessed: Intro to Microbiology Hands-On					
Introduction to Light Microscopy: Identification of parts of a microscope; use of a light and compound microscope				<input type="radio"/>	<input type="radio"/>
Aseptic Technique: Ability to work aseptically; assessed using autoclaved Type 2 water				<input type="radio"/>	<input type="radio"/>
Serial Dilutions and Plating: Microbial Enumeration Perform serial dilutions on a swabbed sample				<input type="radio"/>	<input type="radio"/>
Enrichment Cultures: Culturing Aerobic and Anaerobic Microbes on Selective and Differential Medias: Use of YPD media to grow microbes; use of chart to identify colonies				<input type="radio"/>	<input type="radio"/>
Pure Cultures and Streak Plating: Isolation of Single Bacterial Colonies from a Mixed Sample: Creation of a pure culture of baker's yeast; streaking for isolation from pure colony; assessed on ability to separate colonies and perform technique				<input type="radio"/>	<input type="radio"/>

Supervisor/Issuer: Please use the space below to provide feedback for the earner.

Large empty rectangular area for providing feedback.

Recommend award of the badge:

YES

NO

Earner Signature:

Supervisor Signature:

Issuer Signature:

Empty space for Earner Signature.

Empty space for Supervisor Signature.

Empty space for Issuer Signature.