Catalogue of ASM Courses
Spring 2017 – Winter 2018

ASM offers more than 50 courses for scientists of all career stages, from undergraduates to seasoned professionals. These include career-related courses in the Profession of Microbiology category as well as opportunities for professional development in clinical sciences and epidemiology.

To register for Profession of Microbiology Courses, visit http://www.asm.org/index.php/build-your-skills.

To register for Clinical Sciences and Epidemiology Courses, visit https://www.pathlms.com/asm/courses.

If you have questions about ASM’s courses, contact Bethany Adamec at badamec@asmusa.org.

Profession of Microbiology
Early/Mid/Senior Career Faculty

Hot Topics in Microbiology Education (formerly ASM MOOCs)
The purpose of this course is to expose faculty to the latest trends and developments in microbiology education.
Beginner level
Course Start Date: Fall 2017
Format: Online Course
Cost: $275 (member)/ $350 (non-member)

Best Practices in Curriculum Design, Teaching and Assessment (formerly Science Teaching Fellows)
Prepare aspiring and early-career undergraduate faculty to become competitive candidates for science teaching positions at undergraduate institutions.
Beginner level
Course Start Date: January 2018
Format: Online Course
Cost: $150 (member)/ $225 (non-member)

Graduate Students and Postdoctoral Students and Early Career Scientists
Grant Writing Online Course
The Grant Writing Online Course is a three month, seven-part series on the grant writing enterprise. This online course provides participants with helpful tips, insight into what makes grants successful, and personalized feedback on portions of their grant. Registration is open until July 15, 2017.
Beginner level
Course Start Date: Fall 2017
Format: Online Course
Cost: $175 (member)/ $225 (non-member)

Scientific Writing and Publishing Online Course
Learn the skills needed to successfully publish in scientific journals by attending the three month, seven-part series entitled the Scientific Writing and Publishing Online Course. Led by members of ASM editorial boards, the series covers a wide range of topics including: abstracts and titles, figures and legends, the reviewing process, and how to be a reviewer. Registration will open in fall 2017.
Beginner level
Course Start Date: January 2018
Format: Online Course
Cost: ASM Members: $175 | Non-members: $225
Undergraduates and Postbaccalaureate Students and Graduate Students

Microbe Academy for Professional Development
This course is designed to equip microbial sciences undergraduate, post baccalaureate and graduate students with skills needed to (i) transition successfully to professional society meetings (ii) make a successful presentation (iii) enhance their professional development, (iv) meet and network with peers who share similar interest in microbiology (v) build on networking opportunities with faculty mentors who are also members of ASM and (vi) strengthen mentoring relationships with research and academic advisors. This course is associated with ASM Microbe: http://www.asm.org/index.php/scientific-program-microbe-2017/courses-and-workshops.

Beginner level
Course Start Date: 5/31/2017
Format: Hybrid Course
Cost: Early Bird ASM Student member: $120
      Early Bird Student non-member: $195
      Regular Reg ASM Student member: $170
      Regular Student Reg non-member: $245
Clinical Sciences and Epidemiology

Early/Mid/Senior Career Scientists

Antimicrobial Results Reporting: Communicating Effectively with Clinicians
Attendees of this webinar will learn to: design effective results comments for antimicrobial susceptibility testing reports, communicate to clinicians the difference between Epidemiologic Cutoff Values (ECVs) and clinical breakpoints and review cascade and selective antimicrobial reporting approaches.

Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)

Implementation of Molecular in the Laboratory: Optimizing Space and Workflow
The presenter of this webinar will define space and resource options and provide insight into the physical location of the molecular laboratory based on choice of technology and test menu.

Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)

Introduction to Antimicrobials
Attendees of this webinar will learn to: understand the antibiotic classes and the antibiotics within them, as well as the basic mechanisms of resistance and the intrinsic mechanisms of resistance for commonly encountered pathogens. Finally, they will learn the process of establishing an antimicrobial breakpoint.

Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)

Introduction to Automated Antimicrobial Susceptibility Testing
Attendees of this webinar will learn to: describe the different commercially available AST platforms, discuss the selection of an antibiotic panel for testing and reporting and identify potential AST errors and determine appropriate steps for resolution.

Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)

Introduction to Basic Molecular Biology and Techniques
This webinar describes and applies genetic concepts to molecular diagnostics.

Course Start Date: completed, available on demand
Format: Online Course
Cost: $30 (member)/ $45 (non-member)
MALDI-TOF MS: Routine Aerobic and Anaerobic Bacterial Identification and Implementation
This webinar summarizes basic approaches for troubleshooting MALDI-TOF MS for organism identification.
Beginner level
Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)

MALDI-TOF: Additional Applications
This webinar describes the application of MALDI-TOF MS to the detection of common antimicrobial resistance mechanisms.
Beginner level
Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)

Quality Control and Validation/Verification of Antimicrobial Susceptibility Tests
This webinar discusses the selection of organisms for routine QC of various types of ASTs. It also describes steps to take with reporting patient results when QC is out of range for a specific antimicrobial agent/organism combination and explains the reasons why patient results may be erroneous even when QC is in control. Lastly, it discusses situations when a verification of an AST test is needed and how the verification could be performed.
Beginner level
Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)

Quality Control, Quality Assurance, and Regulatory Issues
This webinar discusses the regulations that must be addressed when setting up molecular testing.
Beginner level
Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)

Quantitative Assays and Standards
This webinar explains the methods used to monitor the quality of calibration and control materials used in quantitative assays.
Beginner level
Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)
Understanding Manual Antimicrobial Susceptibility Tests and Their Enduring Value
Attendees of this webinar will be learn to: list resources available for guidance in performance and interpretation of manual ASTs, discuss pros and cons of using manual versus automated ASTs and describe specific situations where a manual AST would be particularly useful in a clinical laboratory.
Beginner level
Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)

Verification of FDA Approved Tests
This webinar describes the situations in which test method verification must be performed.
Beginner level
Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)

Verification of non-FDA Approved Test
The presenter of this webinar explains a hypothetical verification protocol for a laboratory-developed nucleic acid amplification test.
Beginner level
Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)

Verification of Quantitative Assays
This webinar explains clinically appropriate acceptance criteria for quantitative assay verification.
Beginner level
Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)

Clostridium difficile Testing-How it is Done can Impact on HAI Rates
This webinar explains the potential impact on test methodology on apparent Clostridium difficile infection rates within an institution.
Intermediate level
Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $25 (member)/ $32 (non-member)

Cost Analysis and Justification
Part of the Molecular Diagnostics: Applications for the Diagnosis of Infectious Diseases webinar series. This intermediate series will provide in-depth discussions of current trends and challenges associated with molecular diagnostic methods as they are used and encountered in the clinical microbiology laboratory.
Intermediate level
Course Start Date: 9/20/2017
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)
Diagnosis of Bloodstream Infections
Part of the Molecular Diagnostics: Applications for the Diagnosis of Infectious Diseases webinar series. This intermediate series will provide in-depth discussions of current trends and challenges associated with molecular diagnostic methods as they are used and encountered in the clinical microbiology laboratory.
Intermediate level
**Course Start Date:** 7/12/2017  
**Format:** Webinar (online)  
**Cost:** $30 (member)/ $45 (non-member)

Diagnosis of Central Nervous System Infections
Part of the Molecular Diagnostics: Applications for the Diagnosis of Infectious Diseases webinar series. This intermediate series will provide in-depth discussions of current trends and challenges associated with molecular diagnostic methods as they are used and encountered in the clinical microbiology laboratory.
Intermediate level
**Course Start Date:** 7/26/2017  
**Format:** Webinar (online)  
**Cost:** $30 (member)/ $45 (non-member)

Diagnosis of Fungal Diseases
Part of the Molecular Diagnostics: Applications for the Diagnosis of Infectious Diseases webinar series. This intermediate series will provide in-depth discussions of current trends and challenges associated with molecular diagnostic methods as they are used and encountered in the clinical microbiology laboratory.
Intermediate level
**Course Start Date:** 8/23/2017  
**Format:** Webinar (online)  
**Cost:** $30 (member)/ $45 (non-member)

Diagnosis of Gastrointestinal Infections
Part of the Molecular Diagnostics: Applications for the Diagnosis of Infectious Diseases webinar series. This intermediate series will provide in-depth discussions of current trends and challenges associated with molecular diagnostic methods encountered in the clinical microbiology laboratory.
Intermediate level
**Course Start Date:** 6/28/2017  
**Format:** Webinar (online)  
**Cost:** $30 (member)/ $45 (non-member)

Diagnosis of Respiratory Tract Infections
Part of the Molecular Diagnostics: Applications for the Diagnosis of Infectious Diseases webinar series. This intermediate series will provide in-depth discussions of current trends and challenges associated with molecular diagnostic methods as they are used and encountered in the clinical microbiology laboratory.
Intermediate level
**Course Start Date:** 6/14/2017  
**Format:** Webinar (online)  
**Cost:** $30 (member)/ $45 (non-member)
Diagnosis of Sexually Transmitted Diseases
Part of the Molecular Diagnostics: Applications for the Diagnosis of Infectious Diseases webinar series.
This intermediate series will provide in-depth discussions of current trends and challenges associated with molecular diagnostic methods as they are used and encountered in the clinical microbiology laboratory.
Intermediate level
Course Start Date: 8/9/2017
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)

Emerging Infectious Diseases and the Role of Hospital and Public Health Laboratories
This webinar describes the role that the hospital has in detection of these emerging threats.
Intermediate level
Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $25 (member)/ $32 (non-member)

Evidence-Based Laboratory Medicine Practice Guidelines – A Framework for Justification of Technology
During this webinar, faculty facilitators provide students with personalized feedback and coaching in one on one and group setting and discuss mentoring and career tips to ensure success in the microbial sciences careers.
Intermediate level
Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $25 (member)/ $32 (non-member)

Attendees of this webinar will be learn to: describe common and emerging mechanisms of resistance among the Enterobacteriaceae, discuss testing methods for detection of resistance mechanisms among the Enterobacteriaceae and understand the pros and cons of different testing modalities available for detection of resistance mechanisms among the Enterobacteriaceae.
Intermediate level
Course Start Date: March 29, will be available on demand for one year
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)
Attendees of this webinar will learn to: describe common mechanisms of antimicrobial resistance in the nonfermenting Gram-negative rods, state how to perform and report susceptibility testing of nonfermenters, and discuss strategies to approach challenging testing dilemmas, including absence of breakpoints or multi-drug resistant isolates.
Intermediate level
Course Start Date: April 12, will be available on demand for one year
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)

Gram-Positive Resistance Mechanisms & Testing: Enterococcus/Streptococcus
Attendees of this webinar will learn to: describe common resistance mechanisms found in enterococci and streptococci, understand when to perform antimicrobial susceptibility testing and how to report, and list several recommended methods for performing susceptibility testing.
Intermediate level
Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)

Gram-Positive Resistance Mechanisms & Testing: Staphylococcus
Attendees of this webinar will learn to: describe common mechanisms of antimicrobial resistance in staphylococci, state how to perform and report susceptibility testing of staphylococci, and discuss when a special method to detect β-lactam, clindamycin, or vancomycin resistance in a staphylococcal isolate is indicated.
Intermediate level
Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)

Impact of the Laboratory on Reporting of Health Care-Associated Infections
This webinar discusses best practices for laboratory diagnosis of health care-associated infections.
Intermediate level
Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $25 (member)/ $32 (non-member)

Infection Prevention and Stewardship: Implications Beyond the Lab
Attendees of this webinar will learn to: discuss laboratory-based infrastructure for antimicrobial stewardship initiatives, describe evidence based studies that corroborate laboratory impact to stewardship, and illustrate why laboratory utilization (testing stewardship) goes hand in hand with antimicrobial stewardship.
Intermediate level
Course Start Date: April 26, will be available on demand for one year
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)
Molecular Approaches to Genotyping and Phenotypic Susceptibility Testing
Part of the Molecular Diagnostics: Applications for the Diagnosis of Infectious Diseases webinar series. This intermediate series will provide in-depth discussions of current trends and challenges associated with molecular diagnostic methods as they are used and encountered in the clinical microbiology laboratory.
Intermediate level
Course Start Date: 9/6/2017
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)

Multiplex Testing for Enteric Pathogens-Is It Worth It?
To review viral, bacterial and parasitic causes of diarrhea and provide an overview of commercial multiplex enteric pathogen diagnostic tests.
Intermediate level
Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $25 (member)/ $32 (non-member)

Multiplex Testing for Respiratory Viruses and the Impact on Patient Care/Outcomes
The presenter of this webinar identifies strengths and weaknesses of traditional and molecular laboratory tests for respiratory viruses.
Intermediate level
Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $25 (member)/ $32 (non-member)

Multiplex Testing of Blood Cultures and the Impact on Patient Care/Outcomes
The presenter of this webinar analyzes the potential impact of implementing a rapid method of organism identification in bacteremia as it relates to budget, technologist time, clinical outcomes, and hospital costs.
Intermediate level
Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $25 (member)/ $32 (non-member)

This webinar describes the sequence of tests used in the recommended HIV laboratory testing algorithm.
Intermediate level
Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $25 (member)/ $32 (non-member)
Rapid Influenza Testing and Its Impact on Patient Care
The presenter of this webinar describes the performance and clinical utility of rapid influenza diagnostic tests.
Intermediate level
Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $25 (member)/ $32 (non-member)

The Evolution of Reimbursement for Laboratory Testing
A number of changes have occurred over time that will have a profound effect on the future of reimbursement for laboratory testing. With reimbursement cuts and the evolution of the laboratory to a cost center that no longer contributes to the revenue of a hospital but adds to its costs, it will be essential for clinical microbiology laboratories to be proactive and adopt solutions to ensure future success.
Intermediate level
Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $25 (member)/ $32 (non-member)

The Microbiome and Its Impact on Human Health
This webinar assesses the clinical utility of microbiome characterization as it related to companion diagnostics, treatment selection, prognosis, and microbiome-based therapy.
Intermediate level
Course Start Date: completed, available on demand
Format: Webinar (online)
Cost: $25 (member)/ $32 (non-member)

Basics of Susceptibility Testing for Mycobacteria
Part of the comprehensive webinar series in Antimicrobial Susceptibility Testing: Part 3 - Advanced Susceptibility Testing and Emerging Technologies: The purpose of the series is to cover specialized susceptibility testing for organisms other than common, rapidly-growing aerobic bacteria.
Advanced level
Course Start Date: TBD
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)

Susceptibility Testing and Antifungals for Yeast and Filamentous Fungi
Part of the comprehensive webinar series in Antimicrobial Susceptibility Testing: Part 3 - Advanced Susceptibility Testing and Emerging Technologies: The purpose of the series is to cover specialized susceptibility testing for organisms other than common, rapidly-growing aerobic bacteria.
Advanced level
Course Start Date: TBD
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)
Susceptibility Testing for Fastidious, Anaerobic and Other Bacteria
Part of the comprehensive webinar series in Antimicrobial Susceptibility Testing: Part 3 - Advanced Susceptibility Testing and Emerging Technologies: The purpose of the series is to cover specialized susceptibility testing for organisms other than common, rapidly-growing aerobic bacteria.
Advanced level
Course Start Date: TBD
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)

Up and Coming Technologies in Susceptibility Testing
Part of the comprehensive webinar series in Antimicrobial Susceptibility Testing: Part 3 - Advanced Susceptibility Testing and Emerging Technologies: The purpose of the series is to cover specialized susceptibility testing for organisms other than common, rapidly-growing aerobic bacteria.
Advanced level
Course Start Date: TBD
Format: Webinar (online)
Cost: $30 (member)/ $45 (non-member)