

Water Bacteriology Agenda

Wilson Talent Center Mason, MI August 6-8, 2024

Day	Lecture Topics	Labs
Tuesday		
8:00AM – 8:15AM	Registration and Intro	
8:30AM – 11:30AM (includes 15 min. break)	<ul style="list-style-type: none"> • Basic Microbiology • Total Coliform Bacteria • Multiple Tube Fermentation Technique 	<ul style="list-style-type: none"> • Ex. 1 Innoc TC by MTF - River
11:30AM – 12:15PM	Lunch (provided)	
12:15PM – 2:30PM (includes 15 min. break)	<ul style="list-style-type: none"> • Sampling • Presence Absence Philosophy • E. coli and MUG • Combined Enzymatic Test 	<ul style="list-style-type: none"> • Collect samples • Ex. 2: Innoc HPC, pour & Simplate • Ex. 3: Innoc PA • Ex. 4: Innoc Colilert quantitray
2:30PM – 4:00PM Lab	<ul style="list-style-type: none"> • Membrane Filtration • HPC • Genetic Techniques 	<ul style="list-style-type: none"> • Ex. 5 Colisure • Ex. 6 Pseudalert • Ex. 7: Innoc. MF River
Wednesday		
8:00AM – 11:30AM (includes 15 min. break)	<ul style="list-style-type: none"> • Review • RTCR 	<ul style="list-style-type: none"> • Ex. 1: Read TC by MTF • Ex. 1: Trans TC pos to BGB • Ex. 1: Trans TC pos to EC-MUG
11:30AM – 12:15PM	Lunch (provided)	
12:15PM – 3:00PM (includes 15 min. break)	<ul style="list-style-type: none"> • Nuisance Bacteria • QAQC • PCR/QPCR 	<ul style="list-style-type: none"> • Ex. 3: Read PA • Ex. 4: Read Colilert • Ex. 5: Read Colisure • Ex. 6: Read Pseudalert • • Ex. 7: Read MF
3:00PM – 4:00PM Lab		
Thursday		
8:00AM – 10:15AM (includes 15 min. break)	<ul style="list-style-type: none"> • Virus, Fungi, Protozoa, Cyanobacteria • Biofilms • Removal of Microorganisms 	<ul style="list-style-type: none"> • Ex. 1: Read TC by MTF • Ex. 1: Read E. coli by EC-MUG • Ex. 1: Read BGB • Ex. 9: Gram stain
10:15AM – 11:30AM Lab	<ul style="list-style-type: none"> • Stressed Organisms • Biosensors • Review 	
11:30AM – 12:15PM	Lunch (provided)	
12:15PM – 2:15PM (includes 15 min. break)	<ul style="list-style-type: none"> • Emerging Pathogens • Calculations • General Q&A • Data Interpretation 	<ul style="list-style-type: none"> • Ex. 2: Read HPC pour • Ex. 2: Read Simplate • Ex. 3: Read PA • Ex. 10: BART
2:15PM – 4:00PM Lab/Wrap Up	<ul style="list-style-type: none"> • Review 	<ul style="list-style-type: none"> • Complete calcs • Clean up