

MCB 2010L MICROBIOLOGY LABORATORY SCHEDULE Fall 2016 (2017/18 Term II Session 3)

TEXT: **MICROBIOLOGY LABORATORY MANUAL 3rd Edition; Obenauf & Finazzo**

DATE	Lab Period	LABORATORY PROCEDURES (exercises)	DRAW OR RECORD RESULTS OF	LAB REPORTS DUE
M 1/22	1	Lab Overview & Lab Safety Rules 1* Basic Techniques Use of the Microscope 5 The Microbial World: Protozoans	Microscope Protozoans	
W 1/24	2	4 The Microbial World: Microbial Phototrophs 6 The Microbial World: Fungi	Phototrophs Fungi	Microscope Protozoans
M 1/29	3	2 Basic Techniques: Aseptic Techniques 7 The Microbial World: Motility: Hanging Drop	Hanging Drop	Phototrophs Fungi
W 1/31	4	<input type="checkbox"/> Get Slide Boxes (one per team of 2 – keep in drawer) 8 Staining: Simple Staining & Smear Preparation 9 Staining: Negative Stain	Aseptic Simple Stain Negative Stain	Hanging Drop
M 2/5	5	10 Staining: Capsule Stain 11 Staining: Gram Stain	Gram Stain Capsule Stain	Aseptic Simple Stain Negative Stain
W 2/7	6	12 Staining: Acid Fast Stain 13 Staining: Endospore Stain 14 Media: Blood Agar	Acid Fast Endospore	Capsule Stain Gram Stain
M 2/12	7	*WRITTEN EXAM 1* <i>(on lab periods 1-6)</i> 15 Media: Mannitol Salt Agar (MSA) 16 Media: Eosin Methylene Blue (EMB) 17 Media: MacConkey Agar	Blood Agar	Acid Fast Endospore
W 2/14	8	18 Media: Evaluation of Media 19 Growth: Standard Plate Count 20 Growth: Osmotic Pressure & Growth	MSA EMB MacConkey	Blood Agar
M 2/19	9	21 Growth: Aerotolerance 25 Control of Growth: Antimicrobial Susceptibility 24 Control of Growth: UV Light	Eval Media Plate Count Osmotic Pressure	MSA EMB MacConkey
W 2/21	10	27 Diagnostic Genetics: DNA Fingerprinting 28 Applied Genetics: Bacterial Transformation	Aerotolerance Susceptibility UV Light	Eval Media Plate Count Osmotic Pressure
M 2/26	11	Review for Midterm Practical Exam <i>students may attend review sessions in other lab times as guests</i>	DNA Fingerprinting Transformation	Aerotolerance Susceptibility UV Light
W 2/28	12	⇒ MIDTERM PRACTICAL EXAM <i>(on lab periods 1 – 10)</i> ⇒ MIDTERM WRITTEN EXAM <i>(on lab periods 7 – 10)</i>		Transformation DNA Fingerprinting

M-W 3/5 and 3/7 Spring Break	13	Spring Break		
M 3/12	14	29 Microbes & Disease: Parasitic Protozoans 31 Microbes & Disease: Vectors 30 Microbes & Disease: Parasitic Worms	Parasitic Worms Vectors Protozoans	Parasitic Protists Vectors
W 3/14	15	3 Basic Techniques: Isolation Streak Plate 34 Multisystems: Enterotube II 35 Environmental Microbiology: Soil Microbes	Isolation Streak Plate Passive Agglutination	Parasitic Worms
M 3/19	16	32 Diagnostic Immunology: Immunoprecipitation 33 Diagnostic Immunology: Passive Agglutination 47 Bacterial Unknowns	Immunoprecipitation	Isolation Streak Plate Passive Agglutination
W 3/21	17	46 "Known" bacteria for Biochemical testing	Enterotube	Immunoprecipitation
M 3/26	18	40 Biochemical Testing: Phenol Red (Sugar) Broth 41 Biochemical Testing: Triple Sugar Iron Agar (TSI)	Soil	Enterotube
W 3/28	19	Written Exam 3 <i>(on lab periods 13-18)</i> 22 Oxygen Metabolism: Catalase Test 23 Oxygen Metabolism: Oxidase Test 42 Biochemical Testing: Litmus Milk	Oxidase Catalase	Soil
M 4/2	20	IMViC Testing 43 Biochemical Testing: SIM Medium 43 Biochemical Testing: MR and VP tests 43 Biochemical Testing: Simmon's Citrate Agar	Litmus	Soil Oxidase Catalase
W 4/4	21	36 Biochemical / Hydrolytic: DNase Test 38 Biochemical / Hydrolytic: Starch Test 39 Biochemical / Hydrolytic: Casease Test 37 Biochemical / Hydrolytic: Gelatinase	IMViC Litmus	
M 4/9	22	44 Biochemical Testing: Urease Test 45 Biochemical Testing: Nitrate Reduction	DNase Starch Casease Gelatinase	IMViC Litmus
W 4/11	23	<input type="checkbox"/> Review for Final Practical Exam	Urease Nitrate	DNase Starch Casease Gelatinase
M 4/16	26	⇒ FINAL PRACTICAL EXAM <i>(on lab periods 13 – 25)</i> ⇒ FINAL WRITEN EXAM <i>(on lab periods 20 – 25)</i>		Urease Nitrate Unknown Project Report Due

