

MCB 2010L MICROBIOLOGY LABORATORY SCHEDULE Summer 2018 (20183 Session 3)  
**TEXT: MICROBIOLOGY LABORATORY MANUAL 3<sup>rd</sup> Edition; Obenauf & Finazzo**

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

R 7/19	<b>12</b>	29 Microbes & Disease: <b>Parasitic Protozoans</b> 30 Microbes & Disease: <b>Parasitic Worms</b> 31 Microbes & Disease: <b>Vectors</b> 3 Basic Techniques: <b>Isolation Streak Plate</b>	Parasitic Protists Parasitic Worms Vectors	
M 7/23	<b>13</b>	32 Diagnostic Immunology: <b>Immunoprecipitation</b> 33 Diagnostic Immunology: <b>Passive Agglutination</b> 47 <b>Bacterial Unknowns</b>	Isolation Streak Plate Passive Agglutination	Parasitic Protists Parasitic Worms Vectors
T 7/24	<b>14</b>	34 <b>Enteropluri</b> 35 Environmental Microbiology: <b>Soil Microbes</b> 46 <b>"Known" bacteria</b> for Biochemical testing	Immunoprecipitation	Isolation Streak Plate Passive Agglutination
W 7/25	<b>15</b>	40 Biochemical Testing: <b>Phenol Red (Sugar) Broth</b> 41 Biochemical Testing: <b>Triple Sugar Iron Agar (TSI)</b>	Enteropluri	
R 7/26	<b>16</b>	<b>Written Exam 3</b> <i>(on lab periods 12-15)</i>  22 Oxygen Metabolism: <b>Catalase Test</b> 23 Oxygen Metabolism: <b>Oxidase Test</b> 42 Biochemical Testing: <b>Litmus Milk</b>	Soil Phenol Red TSI Oxidase Catalase	Enteropluri
M 7/30	<b>17</b>	<b>IMViC Testing</b> 43 Biochemical Testing: <b>SIM Medium</b> 43 Biochemical Testing: <b>MR and VP tests</b> 43 Biochemical Testing: <b>Simmon's Citrate Agar</b>	Litmus	Soil Oxidase Catalase Phenol Red TSI
T 7/31	<b>18</b>	36 Biochemical / Hydrolytic: <b>DNase Test</b> 38 Biochemical / Hydrolytic: <b>Starch Test</b> 39 Biochemical / Hydrolytic: <b>Casease Test</b> 37 Biochemical / Hydrolytic: <b>Gelatinase</b>	IMViC	Litmus
W 8/1	<b>19</b>	44 Biochemical Testing: <b>Urease Test</b> 45 Biochemical Testing: <b>Nitrate Reduction</b> <b>Last day to inoculate any test on your unknown.</b>	DNase Starch Casease Gelatinase	IMViC
R 8/2	<b>20</b>	<b>Review for Final Practical Exam</b> <i>students may attend review sessions in other lab times as guests</i>	Urease Nitrate	DNase Starch Casease Gelatinase
M 8/6	<b>21</b>	⇒ <b>FINAL PRACTICAL EXAM</b> <i>(on lab periods 12-19)</i> ⇒ <b>FINAL WRITEN EXAM</b> <i>(on lab periods 16-19)</i>		Urease Nitrate Unknown Project Report Due