



DATE	No	EXPERIMENTAL TOPIC	PAGE
Oct. 18 - 21, 2020	1	❖ Regulation and management of microbiology lab. ❖ Basic laboratory Techniques for Isolation, Cultivation, and Cultural Characterization of Microorganisms.	xi-xiv 1 - 6
Oct. 25 - 28, 2020	2	❖ The microscope and Microscopic examination of living bacterial Preparation: ❖ Microscopic examination of living Microorganisms Using a Hanging drop Preparation or a Wet Mount	35 - 44 45 - 50
Nov. 1 - 4, 2020	3	❖ Bacterial staining ❖ Preparation of bacterial smear ❖ Simple staining ( Direct staining and Negative staining) ❖ Microscopic examination of stained preparation	55 - 57 59 - 63 65 - 74 37 - 41
Nov. 15 - 18, 2020	4	❖ Bacterial staining : * Gram staining	75 - 80
Nov. 22 - 25, 2020	5	❖ Bacterial staining : * Acid fast staining ❖ Differential staining for Visualization of Bacterial Cell Structures * Endospore staining * Capsule staining	81 - 86 87 - 95
Nov. 29 – Dec. 2, 2020	6	❖ Culture transfer techniques ❖ Serial Dilution-Agar plate procedure to Quantitate Viable cells ❖ Microbial population in soil :enumeration	13 - 18 139 - 148 355 - 360
Dec. 6 - 9, 2020	7	❖ Techniques for isolation of pure cultures ❖ Cultural characteristics of microorganisms- colony morphology	19 - 28& Sheets 29 - 34& Sheets
<b>ONLINE MIDTERM EXAM (( WILL BE ANNOUNCED LATER )) Includes Experiments (1 - 6)</b>			
Dec. 13 - 16, 2020	9	❖ Microscopic characteristics of bacteria * Cell morphology ❖ Macroscopic characteristics of bacteria * Growth morphology ❖ Physical factors: * Atmospheric oxygen requirements	Revision of labs. 2-4 29 - 35 127 - 138
Dec. 20 - 23, 2020	10	❖ Physical factors: * Temperature, pH ❖ Physical and Chemical agent of control: * Physical agent * Chemotherapeutic Agents * Disinfectants and Antiseptics	117 - 126 289 - 302 303 - 312 319 - 326
Dec. 27 – 30, 2020	11	❖ Cultivation of Microorganisms: Nutritional and Physical requirements, and enumeration of microbial populations ❖ Media for the routine cultivation of bacteria ❖ Use of differential and selective media	97 - 98 99 - 104 105 - 116
Jan. 3 – 6, 2021	12	❖ Biochemical activities of Microorganisms: * Starch and Gelatin hydrolysis * Triple sugar-Iron * IMVIC tests * Hydrogen sulfide test * Catalase test * Motility test * Utilization of Amino Acid ❖ Genus Identification of unknown bacterial culture	159 - 160 161 - 168 175 - 178 179 - 190 191 - 194 209 - 212 Disc. 217 - 222 223 - 228
<b>ONLINE FINAL EXAM (( WILL BE ANNOUNCED LATER ))</b>			
<b>Grading system :</b> Reports & Lab. Work      10% Quizzes                      15% Midterm Exam.            25% Final Exam                 50% <hr/> Total                            100%		<b>COORDINATOR:</b> <b>BAYEN MAHAWREH</b>  <b>OFFICE HOURS:</b> Monday, Tuesday, Wednesday, Thursday 9:00 – 11:00 Am	

REFERENCE : Cappuccino J. and Sherman N. 2014 .Microbiology : A laboratory manual. 10<sup>th</sup> ed, Pearson Education Limited.