**Practical course of SPECIAL MICROBIOLOGY/1st semester 2023/2024**

1. Laboratory Biosafety, Biosecurity Microscope and Laboratory tools.
2. Simple Staining and Gram Staining.
3. Acid-fast stain and Spore stain.
4. Capsule stain.
5. Motility test.
6. Bacterial Cultivation and types of media.
7. Nutrient agar, blood agar and Chocolate agar.
8. EMB agar, MacConkey agar, SS agar and MSA.
9. Catalase test, Oxidase test, Sugar fermentation test, TSI test and SIM test
10. Mycology: sampling
11. Mycology: types of media
12. Mycology: media and cultivation
13. Mycology: staining

**Practical course of SPECIAL MICROBIOLOGY/2nd semester 2023/2024**

1. Staphylococcus spp (MSA, DNase test, Coagulase test, Gelatinase test, Phosphatase)

2. Streptococcus spp (Blood agar, Chocolate agar Catalase test, Oxidase test, Sugar fermentation test)

3. Bacillus spp. (Blood agar, Starch hydrolysis test, Gelatinsae test)

4. E. coli (MacConkey agar, EMB, Indole test, TSI test, Simmon Citrate utilization)

5. Klebsiella spp. (MacConkey agar, Urease test, Simmon Citrate utilization test, IMViC test)

6. Salmonella spp. (MacConkey agar, SS agar, SIM test, TSI, Simmon Citrate utilization test)

7. Proteus spp. (MacConkey agar, Urease test, TSI test, Simmon Citrate utilization test, Phenylalanine test)

8. Pseudomonas spp. (MacConkey agar, Oxidase test, TSI, O/F test)

9. Listeriaspp. (Blood agar, Listeria agar, Motility test)

10. Mycology