**Non CLS- Dental (CLS 212)**

**Course Title: Medical Microbiology**

**Credit Hours: 3 + 1 = 4**

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| **DAY** | **8-9** | **9-10** | **10-11** | **11-12** | **12-1** | |
| **SUN** |  | **CLS 212[5717] DENTAL Dr. Tagreed office No 11T98**  **Lecture room No 73** | | |  | |
| **MON** |  | |  | | |  |

**Course Description:**

This is a general medical microbiology course intended for students outside the department of Clinical Laboratory Sciences. The structure of the course is based on presenting the fundamentals of microbiology to include structures, morphology and classification of bacteria, viruses, fungi and parasites. The students will be introduced to the pathogenesis of the various infectious agents. The course will also cover some topics related to community health, including the modes and sources of infections as well as prevention of these infections.

**CLS 212: Lectures Outline**

**Weeks Subjects**

1. General introduction of Microbiology

2. Introduction to Viruses

Structure and morphology of viruses

3. Introduction to Fungi

Structure and morphology of fungi

4. Introduction to Parasites

Classification /General characteristics of protozoa,

General characteristics of helminths

5. Introduction to Bacteria

Classification / Morphology

Bacterial Structures / Bacterial replication

6. Bacterial growth / Growth curve

Factors affecting growth

7. Antimicrobial agents

8. Microbial control / Principles/ Hospital acquired infection

9. Pathogenicity of infectious diseases

Normal microbial flora

10. Upper and Lower respiratory tract infections

Wound and skin infections

11. Sexually transmitted diseases

Food borne diseases, Water borne diseases

**CLS 212: Laboratory Schedule**

**Weeks Subjects**

1. Introduction to Microbiology laboratory

Techniques and safety rules

2. Introduction to light Microscopy

Types of light microscope

3. Examination of stained smear and wet mounts

4. Microscopic examination of eukaryotic microorganisms

5. Staining of bacterial cells and bacterial

structures ( simple and differential stains )

6. Bacterial culture media

Techniques of cultivation

7. Microbial flora of skin and oral cavity

Environmental sampling

8. Antimicrobial Agents - Methods of sensitivity testing

9. Microbial count : viable and total counts

10. Factors affecting microbial growth

11. Physical and chemical methods used in microbial

control

12. **Revision**

13. **FINAL PRACTICAL EXAMINATION**

**Assessments:**

Mid Term Examination: Written 20

Mid Term Examination: Practical 20

Final Practical Examination: 20

Final Theoretical Examination: 40

**During the lecture: all the electronic devices are not allowed**

**References:**

 