**Level 4 (CLS 311)**

**Course Title: Basic Microbiology**

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

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| --- | --- | --- | --- | --- | --- |
| **DAY** | **8-9** | **9-10** | **10-11** | **11-12** | **12-1** |
| **SUN** |  |  |  |  |  |
| **MON** | **CLS 311[1054]**  **DrTaghreed/Ohood**  **Room No G76** | | |  | |
| **TUE** | **CLS 311[36410]**  **DrTaghreed/Ohood**  **Room No S20** | | |  | |

**Course Description:**

This course provides the students with basic theoretical and practical aspects of various groups of microorganisms to include bacteriology, virology, mycology, and parasitology. It also introduces the basic concepts of general microbial control.

**CLS 311: Lectures Outline**

**Weeks Subjects**

1. General introduction to Microbiology

Historical background and Classification of

Microorganisms

2. Introduction to Viruses:

Classification, morphology and structure, Replication and

Pathogenicity

3. Introduction to Fungi:

Classification, morphology and structure, Replication and

Pathogenicity

4. Introduction to Parasites:

Classification, General Characteristics of parasites and

Medically important Parasites

5. Introduction to Bacteria:

Classification, Morphology and Structures

6. Mid-term exam

7. Microbial Growth requirements, Bacterial Growth:

Growth curve, Constant and synchronous growth

8. Microbial, Bacterial Metabolism

9. Microbial, Bacterial Genetics

10. Microbial Control:

Principles, Disinfectants, antiseptics, and preservatives

Physical and chemical methods of sterilization

11. Pathogenicity of Infectious Diseases

12. Normal Microbial flora

**CLS 311: Laboratory Schedule**

**Weeks Subjects**

1. Introduction to Microbiology laboratory techniques and

safety rules

2. Introduction to Microscopy

Types of Microscopes.

3. Examination of Stained Smear and Wet

Preparation.

4. Microscopic examination of microorganisms.

5. Staining of Bacterial Cells ( simple staining )

6. Staining of Bacterial Cells ( differential staining )

7. Preparation and Types of Culture Media

8. Bacterial Culture Techniques

Colonial Morphology

9. Bacterial Count ( Total& Viable )

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 15

On Tuesday 19/5/1436 – 10/3/2015, 8-9 am

Quiz: Written 5

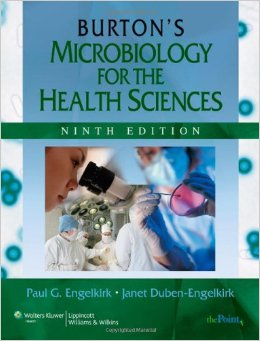
On Tuesday 25/6/1436 – 14/4/2015, 8-9 am

Mid Term Examination: Practical 20

Final Practical Examination: 20

Final Theoretical Examination: 40

**References:**



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

