**Level 6 (CLS 411)**

**Course Title: Clinical Bacteriology ( I )**

**Credit Hours: 2 + 1 = 3**

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| **DAY** | **8-9** | **9-10** | | **10-11** | **11-12** | **12-1** |
| **SUN** |  | | | |  |  |
| **MON** |  | | **CLS 411**  **Practical** | | **CLS 411[1071]**  **DrTaghreed**  **Room No S20** | |
| **TUE** |  | |  | | | |
| **Wed** |  | | **CLS 411**  **Practical** | | **CLS 411[39072]**  **DrTaghreed**  **Room No S11** | |

**Course Description:**

The first part of this course deals with the theoretical and practical aspects of chemotherapeutic agents, their modes of action, methods of evaluation, susceptibility testing , and mechanisms of microbial resistance.

The second part of the course describes the mechanisms of host parasite relationships, followed by a detailed study of the structure and physiology of Gram positive cocci and Gram negative cocci, the aerobic spore and non-spore forming bacilli, and the Mycobacteria. The diseases caused by these organisms, the clinical presentation, pathogenesis, modes of transmission, laboratory diagnosis, prevention and control will be fully discussed.

**CLS 411:Lectures Outline**

**Weeks Subjects**

1. Chemotherapeutic agents / Antibiotics – Definition,

Modes of action, methods of evaluation

2. Antibiotics cont… mechanisms of resistance, Susceptibility testing

3. Staphylococci and Micrococci

4. Streptococci – The Beta and Alphahaemolytic streptococci, Viridansstreptococci, Enterococci

5. Neisseria , Moraxella, Kingella, Eikenella, Acinetobacter, Aerococcus, Peptococcus, Veillionella,andGemella

6. Mid-term exam

7. Corynebacteria

8. Listeria, Erysipelothrix, Lactobacilli, Kurthia

9. *M. tuberculosis* and *M. leprae* and the Atypical Mycobacteria

10. Actinomycetes&Nocardia

11. The aerobic spore bearers – Bacilli

Bacillus anthracisand other spore forming-bacilli

12. Fastidious gram negative rods:

Legionella, Francisella ,,Gardnerella, Pasteurella

**CLS 411: Laboratory Schedule**

**Weeks Subjects**

1. Antibiotic evaluation : Minimum Inhibitory and Bactericidal Concentration

2. Antibiotic susceptibility testing : Kirby Bauer and

Stokes’ methods

3. Staphylococci : Culture on different media, identification

Tests e.gCoagulase,DNase, Novobiocin sensitivity …

4. Beta haemolytic streptococci: Culture and identification

Bacitracin sensitivity, CAMP test, Lancefield grouping

5. *Streptococcus pneumonia* &Viridansstreptococci :

culture and identification, Optochin sensitivity

Non haemolytic streptococci (Enterococci):

Culture and identification

6. Culture and identification of Neisseria, Moraxella and Acinetobacter

7. The Corynebacteria: Culture and identification,

growth on Tinsdale medium, Elek’s test plate

8. Listeria and Erysipelothrix: Culture and identification

9. Mycobacteria: Fluorescent and ZN stains.

Culture on LJ and other media

10 Actinomyces and Nocardia

11. The aerobic spore bearers: Culture and identification

Of *B.anthracis* and *B.cereus*, and spore stain

12. **REVISION**

13. **Final Practical Examination**

**Assessments:**

Mid Term Examination: 15

On Wednesday 20/5/1436 – 11/3/2015, 8-9 am

Quiz: 5

Group 1071:On Monday24/6/1436 – 13/4/2015, 11-12 am

Group 39072:On Wednesday 26/6/1436 – 15/4/2015, 11-12 am

Mid Term Practical Examination: 20

Final Practical Examination: 20

Final Theoretical Examination: 40

**References:**



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

