**Environmental Health Microbiology Class Schedule**

**Course Plan**

Health faculty

Field: Environmental Health

Responsible for the program:

Course Name: General Microbiology Degree: Bachelor

Number of theoretical units: 0.5

Number of practical units: 0.5

Prerequisite: None

**The general topics of this course include the following**:

1) Introduction of microbiology and history and comparison of prokaryotic and eukaryotic cells.

2) Anatomical structure of bacteria Genetics of bacteria Metabolism and growth of bacteria Relationship between host and parasite.

3) Sterilization, the effect of physical and chemical substances on bacteria.

4) Familiarity with different types of microscopes and their application, bacterial staining methods.

5) Classification of different culture media and bacterial culture methods.

6) Familiarity with enzymatic and biochemical methods in the diagnosis of bacteria.

7) Antibiogram.

8) Micrococcus Streptococcus neisseriaceae.

9) Enterobacteriaceae.

10) Pseudomonas.

11) Legionella Brucella, Bordetella and Haemophilus

12) Vibrio, Campillo, Helicobacter and Aeromonas

13) Bacillus and Clostridium corynebacterium and Listeria and related bacteria

**General purpose:**

Familiarity of students with the generalities of bacteria and virology and infectious diseases and the basic principles of laboratory diagnosis

**Specific goals**

The student must be able to:

* Explain the types of bacteria and their classification.
* Describe the anatomical structures of bacteria.
* Describe sterilization methods.
* Explain the types of culture media and methods of making and growing bacteria
* Explain the sensitivity of antibiotics.
* Describe the types of important bacteria and the diseases that result from them
* Describe the generalities of virology and viral diseases.

**Teaching method:**

Lectures, use of PowerPoint, participatory and student-centered education

**Terms of implementation:**

Educational facilities:

Slide projector, video projector and computer.

**Teacher**

Professors, Department of Microbiology, School of Medicine.

**The main teaching resources:**

Medical Microbiology Murray 2016 latest edition.

**Assessment:**

How to evaluate:

Class exams.

Final test in the form of a four-choice test.

How to calculate the total score:

* Class Quiz 2 points
* Midterm exam 6 points
* Final test of 12 points

**Regulations:**

Minimum passing score 10

The number of times allowed to be absent, the student class is not allowed to be absent only in justified circumstances with the approval of the instructor can be 4.17 absenteeism

Schedule of Microbiology - Bachelor of Public Health

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| session | day | Date | time | Subject and lecturer |
| 1 | Wednesday |  | 10-12 | History, classification, structure and functions of bacteria. |
| 2 | Wednesday |  | 10-12 | Growth, metabolism and genetics of bacteria. |
| 3 | Wednesday |  | 10-12 | Antimicrobials (disinfectants and antibiotics). |
| 4 | Wednesday |  | 10-12 | Gram-positive purulent cocci. |
| 5 | Wednesday |  | 10-12 | Gram-negative purulent bacteria. |
| 6 | Wednesday |  | 10-12 | Enterobacteriaceae and related bacteria. |
| 7 | Wednesday |  | 10-12 | Pseudomonas, fungal-like bacteria and zoonotic  Bacteria. |
| 8 | Wednesday |  | 10-12 | Uncommon bacteria (Mycoplasma, Rickettsia, Chlamydia, etc.) Legionella and Spirochetes. |