**Environmental Health Microbiology Lesson Plan**

**Theoretical and practical courses**

Introduction to the course: General Microbiology

School: Health

Field and Degree: Bachelor of Environmental Health

Number and type of units (theoretical): 0.5 theoretical units - 0.5 practical units

Prerequisite courses: None

Phone and call days:

Department: Microbiology

Day, time and place: Wednesday 12-10

Name of the person in charge of the course (lecturer): 0.5 theoretical unit-0.5 practical unit

Office Address: Department of Microbiology

**General Objective of the course**: Familiarity of students with the generalities of bacteria and virology and infectious diseases and the basic principles of laboratory diagnosis

Course Description: General Microbiology

**Specific or in detail objectives of the course:**

At the end of this course, the student is expected to 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.

**Student duties (student homework during the semester):**

1. Attend all class sessions
2. Learning the materials presented in the class
3. Student readiness to answer oral and written questions in class
4. Holding class conferences
5. Obtaining a passing score in the midterm and final exam

**The main sources of the lesson:**

Murray Medical Microbiology 2016 latest edition

Teaching methods + teaching aids used:

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

Virtually held if needed

Methods and time of assessment and evaluation of the student and the barrelated to each evaluation:

* 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

**Lesson rules and expectations from students:**

**Schedule and predicted contents of each theory session**

|  |  |  |  |
| --- | --- | --- | --- |
| row | session | title | Necessary preparation of students before the start of the class |
| 1 | first | History, classification, structure and functions of bacteria | Attend class on time |
| 2 | second | Growth, metabolism and genetics of bacteria | Attend time in class - review the lesson of the previous session |
| 3 | third | Antimicrobials (disinfectants and antibiotics) | Attend time in class - review the lesson of the previous session |
| 4 | fourth | Gram-positive purulent cocci | Attend time in class - review the lesson of the previous session |
| 5 | fifth | Gram-negative purulent bacteria | Attend time in class - review the lesson of the previous session |
| 6 | sixth | Enterobacteriaceae and related bacteria |  |
| 7 | seventh | Pseudomonas, fungal-like bacteria and zoonotic bacteria | Attend time in class - review the lesson of the previous session |
| 8 | eighth | Uncommon bacteria (Mycoplasma, Rickettsia, Chlamydia, etc.) Legionella and spirochetes | Attend time in class - review the lesson of the previous session |