Theoretical and practical course plan form - Ilam University of Medical Sciences

\* Introduction to the course: Specialized bacteriology \* First semester:

\* School: Paramedical Department: Microbiology

\* Course Name and Number: Bacteriology

\* Field and Degree: Bachelor of Science in Laboratory, 5th Semester

\* Day and time: Saturday and Tuesday 10-8

\* Venue: Paramedical School

\* Name of the person in charge of the course (course instructor):

\* Prerequisite courses: None

\* Office address:

**General Objective of the course**: Familiarity of students with the general characteristics of bacteria, pathogenicity, diagnosis and treatment of bacterial diseases

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

• Familiarity of students with the types of toxins produced by bacteria, familiarity with the natural flora of the body and also learning the necessities of bacterial vaccines

• Familiarity of students with different types of pathogenic bacteria in the group of gram-positive and gram-negative cocci and learning different pathogenic processes

•. Students with different types of pathogenic bacteria in the group of helical bacteria and unusual bacteria and learning different pathogenic processes

**Training method.**

• Content is presented using PowerPoint. If there is a need for explanation and the student wants to provide more explanation, the writing process on the whiteboard is used. After a presentation of about 25-30 minutes, students are given the opportunity to discuss the items explained in groups of 5-6 or two, and then one person from the group is selected to give a brief explanation. He is allowed to talk about the lesson for about 7-10 minutes. In each session there is the possibility of 2 to three group discussions in class

• Behavioral goals (behavioral goals have an audience, behavioral verb, degree and criteria and conditions of performance)

• Student tasks (student homework during the semester): Students should be able to learn and explain some of the issues raised in the specific and general objectives of the lesson while attending class on time.

• Main sources (observing the principles of source writing and giving an address for their preparation, including library, bookstore, internet, ......)

1. Moray Medical Microbiology book or its translation (latest edition)

**• Teaching methods and teaching aids used:**

1- Content is presented using PowerPoint. If there is a need for explanation and the student wants to provide more explanation, the writing process on the whiteboard is used.

2- After a presentation of about 25-30 minutes, students are given the opportunity to discuss the items explained in groups of 5-6 or two, and then a member of the group is selected to give brief explanations. And he is allowed to talk about the lesson for about 7-10 minutes. In each session there is the possibility of 2 to three group discussions in class.

• **Methods and time of assessment and evaluation of the student** and the bar related to each evaluation: (Type of exams in terms of how to design a question - loading - time of exams and assignments should be mentioned)

|  |  |  |  |
| --- | --- | --- | --- |
| method | score | date | time |
| Quiz, group discussion, seminar  midterm  End of semester | 2 |  |  |
| midterm | 8 |  |  |
| End of semester | 10 |  |  |

Lesson rules and expectations from students

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| session | day | date | time | topic | lecturer |
| 1 | Saturday |  | 8-10 | Staphs and related organisms |  |
| 2 | Tuesday |  | 8-10 | Streps |  |
| 3 | Saturday |  | 8-10 | Enterococci and other gram-positive cocci |  |
| 4 | Tuesday |  | 8-10 | Bacillus |  |
| 5 | Saturday |  | 8-10 | Listeria varizo plutrix |  |
| 6 | Tuesday |  | 8-10 | Corynebacteria nocardia and dependent bacilli + actinomycosis |  |
| 7 | Saturday |  | 8-10 | Mycobacterium 1 |  |
| 8 | Tuesday |  | 8-10 | Mycobacterium 2 |  |
| 9 | Saturday |  | 8-10 | Neisseria |  |
| 10 | Tuesday |  | 8-10 | Enterobacteriaceae 1 |  |
| 11 | Saturday |  | 8-10 | Enterobacteriaceae 2 |  |
| 12 | Tuesday |  | 8-10 | Yersinia |  |
| 13 | Tuesday |  | 8-10 | Vibrio, Aeromonas |  |
| 14 | Saturday |  | 8-10 | Campylobacter and Helicobacter pylori |  |
| 15 | Tuesday |  | 8-10 | Pseudomonas and related organisms + Acinetobacter |  |
| 16 | Tuesday |  | 8-10 | Haemophilus and related organisms |  |
| 17 | Tuesday |  | 8-10 | Brucella, Bordetella |  |
| 18 | Tuesday |  | 8-10 | Francisella, Legionella |  |
| 19 | Saturday |  | 8-10 | Miscellaneous gram-negative bacilli |  |
| 20 | Tuesday |  | 8-10 | Gram-positive spore-bearing and anaerobic bacilli 1 |  |
| 21 | Saturday |  | 8-10 | Gram-positive bacilli without spores and anaerobic |  |
| 22 | Tuesday |  | 8-10 | Anaerobic gram-negative bacilli |  |
| 23 | Saturday |  | 8-10 | treponema |  |
| 24 | Tuesday |  | 8-10 | , Borrelia, Leptospira |  |
| 25 | Saturday |  | 8-10 | Mycoplasma and plasma urea |  |
| 26 | Tuesday |  | 8-10 | Rickettsia, Orientia |  |
| 27 | Saturday |  | 8-10 | Ehrlichia, Anaplasma and Coxiella |  |
| 28 | Tuesday |  | 8-10 | Chlamydia |  |