Universidad Zaragoza

Year : 2019/20

29304 - Oral Microbiology

Syllabus Information

Academic Year: 2019/20
Subject: 29304 - Oral Microbiology
Faculty / School: 229 - Facultad de Ciencias de la Salud y del Deporte
Degree: 442 - Degree in Odontology
ECTS: 6.0
Year: 1
Semester: Second semester
Subject Type: Basic Education
Module: ---

1.General information

1.1.Aims of the course

1.2.Context and importance of this course in the degree

1.3.Recommendations to take this course

2.Learning goals

2.1.Competences

2.2.Learning goals

2.3.Importance of learning goals

3.Assessment (1st and 2nd call)

3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

4.Methodology, learning tasks, syllabus and resources

4.1.Methodological overview

4.2.Learning tasks

5.Activities and resources

5.1.Presentación overall methodological
The learning process that is designed for this subject is based on the following:

The course is structured in 30 lessons magisterial participative, 10 hours of problems and cases in sessions of approximately 2 hours, 20 hours of laboratory practice and 14 hours practical work (portfolio).

Learning 5.2.Actividades

The program that the student is offered to help you achieve the expected results includes the following activities ...

PRACTICAL PROGRAM
Laboratory classes. Will take place in the Microbiology Laboratory, in 3 groups of students. These practices consist of:

Preparation of culture media.

Staining and observation of microorganisms.

Identification of microorganisms. biochemical tests.

Study of antimicrobial susceptibility testing.

PROBLEMS AND CASES

Presential 10 hours. Will take place in the classroom assigned in 2 groups. In these practices, students, working in groups or individually, resolve issues related to the agenda of the subject.

PRACTICAL WORK SUPERVISED.

No presential. 20 hours. Students, individually or in groups, develop a paper on a topic related to the subject (portfolio). Tutored by the teacher.

THEORY

The lectures will take place in classroom planned for this purpose and the content is distributed in the following blocks:

Introduction to Oral Microbiology. Overview of microorganisms

Etiologic agents of oropharyngeal infections

Dental microbiology

4.3.Syllabus

1. Introduction to Microbiology.

PART I: OVERVIEW OF MICROORGANISMS

2. Methodology, morphological observation and study of the utilization of microorganismos.
3. Morphology of bacteria.
4. Bacterial physiology. Metabolism.
5. Bacterial genetics.
6 Control of bacterial growth.
7. Antimicrobials.
8. Guest-parasite relation.
9. General characteristics of the immune response.
10. Microbiological diagnosis.
11. Epidemiology and prophylaxis.
12. General characteristics of virus.
13. General characteristics of fungi.
14. General characteristics of parasites.
15. Laboratory diagnosis of infectious diseases.

PART II: INFECTIONS

16. Staphylococcus.
17 Streptococcus.
18. Anaerobic bacteria I.
19. Anaerobic bacteria II.
20. Gram-positive facultative anaerobes of oral interest.
21. Gram-negative facultative anaerobes of oral interest.
22. Acid-fast bacteria.
23. Spirochetes.
24. Candida and other fungi of dental interest.
25. Human parasitosis. Parasites of dental interest.

26. RNA virus of oral interest.
27. DNA virus of oral interest.
28. Hepatitis.
29. HIV.
PART III : DENTAL MICROBIOLOGY
30. Composition and ecology of the oral microbial flora.
31. Microbiology of dental plaque.
32. Microbiology of tooth decay.
33. Periodontal and peri-implant microbiology .
34 Systemic implications of oral infections.

4.4.Course planning and calendar

4.5.Bibliography and recommended resources