

68410 - Microbiology research; parasitology, immunology

Syllabus Information

Academic Year: 2020/21

Subject: 68410 - Microbiology research; parasitology, immunology

Faculty / School: 104 - Facultad de Medicina

Degree: 530 - Master's in Introduction to Medical Research

ECTS: 5.0

Year: 1

Semester: Second semester

Subject Type: Optional

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

This matter has been designed for graduates in biosanitary area, Biology, Biochemistry, etc. It is advisable previous knowledge of Microbiology, Parasitology, Molecular Biology, Immunology and English.

For contacting with professors:

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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

The methodology followed in this course is oriented towards achievement of the learning objectives. The course has a predominantly applied orientation so that the proposed activities are focused on the one hand, on the application of the scientific method for designing research projects. On the other, it focuses on the possibility of contacting research lines already established and consolidated to facilitate the elaboration of the final project and, as a consequence, the orientation to research tasks.

4.2.Learning tasks

The course includes the following learning tasks:

- Lectures
- Literature review of articles of the course syllabus

4.3.Syllabus

The course will address the following topics:

1. Presentation of the course
2. Research in Medical Microbiology (Clinical Microbiology)
3. Molecular Microbiology: Introduction
4. Molecular Microbiology Microbiology Molecular Techniques and Applications
5. Molecular Microbiology: Molecular basis of pathogenicity in Gram negative
6. Molecular Microbiology: Molecular Epidemiology
7. Molecular Microbiology Molecular Epidemiology Bases
8. Molecular Microbiology: Molecular basis of antibiotic resistance
9. Molecular Microbiology: Molecular basis of pathogenicity in Gram positive
10. Molecular Microbiology: Molecular basis of pathogenicity in mycobacteria
11. Parasitology research methods (tropical parasitic diseases: microscopy techniques applied to diagnosis and identification of parasites)
12. Research Methods in Parasitology (tropical parasitic diseases: molecular techniques applied to diagnosis and epidemiological studies in Parasitology)
13. Medical Immunology

4.4.Course planning and calendar

Timetable

- MONDAY AFTERNOON: 11, 18, 25 January. 1, 8, 15, 22 February.
- Location: Room 4 aulario B of the Faculty of Medicine.

Further information concerning the timetable, classroom, assessment dates and other details regarding this course, will be provided on the first day of class or please refer to the Faculty of Medicine <https://medicina.unizar.es/>.

4.5.Bibliography and recommended resources