

# 68410 - Microbiology research; parasitology, immunology

#### Información del Plan Docente

Academic Year 2017/18

Faculty / School 104 - Facultad de Medicina

**Degree** 353 - Master's in Introduction to Medical Research

530 - Master's in Introduction to Medical Research

**ECTS** 5.0

Year ---

Semester Indeterminate

Subject Type Optional

Module ---

- 1.General information
- 1.1.Introduction
- 1.2. Recommendations to take this course
- 1.3. Context and importance of this course in the degree
- 1.4. Activities and key dates
- 2.Learning goals
- 2.1.Learning goals
- 2.2.Importance of learning goals
- 3. Aims of the course and competences
- 3.1.Aims of the course
- 3.2.Competences
- 4.Assessment (1st and 2nd call)
- 4.1. Assessment tasks (description of tasks, marking system and assessment criteria)
- 5.Methodology, learning tasks, syllabus and resources
- 5.1. 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.



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## 5.2.Learning tasks

The course includes the following learning tasks:

- Lectures
- · Literature review of articles of the course syllabus

### 5.3. 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

### 5.4. Course planning and calendar

#### **Timatable**

- MONDAY AFTERNOON: 9, 16, 23 January. 6, 13, 20, 27 February. 13 March.
- 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 <a href="https://medicina.unizar.es/">https://medicina.unizar.es/</a>.

## 5.5.Bibliography and recommended resources