



INSTITUTO DE HIGIENE E  
MEDICINA TROPICAL  
DESDE 1902

## MALARIA

### *CU characterization:*

#### *CU name:*

Malaria

#### *Scientific area acronym:*

PM

#### *Duration:*

Semestral

#### *Working hours:*

60

#### *Contact hours:*

28

#### *ECTS:*

2

#### *Observations:*

Optional CU

### *Teacher in charge and respective teaching load in the CU:*

Ana Paula Arez – 9 hours

### *Other teachers and respective teaching load in the CU:*

Carla Sousa – 6 hours

Fátima Nogueira – 8 hours

Henrique Silveira – 7 hours

João Pinto – 4 hours

Pedro Cravo – 6 hours

### *Intended learning outcomes (knowledge, skills and competences to be developed by the students):*

After this unit, students should be able to:

1. To know the malaria life cycle – parasite and hosts – human and mosquito vector.
2. To improve knowledge about interactions between the parasite and the two hosts.



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*Intended learning outcomes (knowledge, skills and competences to be developed by the students): (continuation)*

3. To know different areas of interest in the study of malaria and its relevance.
4. To know and implement some basic methodologies for the experimental study of malaria, following the main phases of the parasite life cycle.

### *Syllabus:*

- I. Review of malaria basic concepts;
- II. Aspects of the three components of malaria life cycle:  
Parasite: resistance to antimalarial drugs ;  
Interaction host-parasite  
human – importance of the host cell and its metabolic pathways on the parasite development;  
mosquito – response to the infection and use of experimental murine model.
- III. Approach to the main means of preventing and treatment of malaria from a perspective of establishing control strategies and tools.

### *Teaching methodologies (including assessment):*

The UC is organized into 4 introductory theoretical classes, 3 theoretical-practical classes, 2 classes with laboratory practice, 2 tutorial classes and 1 written theoretical exam, in a total of 28 classroom hours.

The assessment consists of a theoretical exam. The exam consists of 25 multiple-choice questions (0.5 points/question) and five medium development questions (addressing topics from practical classes, maximum 1 page, 1.5 points/question) and classified on a scale of 0-20 values.

Approval is gathered if minimum attendance is accomplished and exam final classification is equal or above 10.

The evaluation on a 2nd phase, for students who fail or require an improvement of the examination note, is also done by an written exam with 25 multiple-choice questions five medium-length questions.

The evaluation of the CU as well as of its teachers is carried out through the evaluation system routinely used at IHMT.

### *References for consultation / mandatory existence:*

Slides shown at classes, the support material, laboratorial protocols, etc are available to students through *moodle* platform and/or directly by teachers. A specific list of bibliographic references is recommended for each class, being this information previously available together with summaries and contents of the classes.