

INTRODUCTION TO MEDICAL PARASITOLOGY

CU characterization: CU name: Introduction to Medical Parasitology Scientific area acronym: PA **Duration**: Semiannual Working hours: 41 Contact hours: 14 ECTS: 2 **Observations:** Mandatory CU In this school year, the distribution of classes was as follows: T: 8 hours; P: 2 hours; OT: 4 hours; Evaluation: 2 hours

Teacher in charge and respective teaching load in the CU: Isabel Maurício - 7 hours

Other teachers and respective teaching load in the CU: Paulo Almeida – 1 hour Sandra Antunes – 1 hour Ana Domingos – 1 hour Cláudia Conceição – 1 hour Dinora Lopes – 1 hour Gabriela Santos-Gomes – 1 hour Carla Sousa – 2 hours



INTRODUCTION TO MEDICAL PARASITOLOGY

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

After this unit, students should be able to:

- **1.** Define the discipline of Medical Parasitology and describe the importance of parasites in human health.
- 2. Describe the main groups of parasites and indicate their taxonomic classification.
- 3. Use correctly appropriately terms and concepts in parasitology.
- 4. Use Biosystematic rules correctly.
- 5. Name and use laboratory instruments, such as the microscope and others.
- **6.** Indicate and identify the main ethical principles of research in humans and other animals in Medical Parasitology
- 7. Choose databases and search scientific literature.
- 8. Use correct forms of referencing.
- 9. Indicate the rules for communicating scientific results in Health in a scientific manner.
- **10.** Use essential molecular biology terms and concepts correctly.
- **11.** Suggest molecular biology methods for specific purposes.
- **12.** Choose important computer resources in parasitology.
- **13.** Discuss a current topic about one or more parasitic diseases of medical importance, including their control.

Syllabus:

- I. Presentation of the UC. Objectives of the UC. Medical Parasitology.
- **II.** Terminology and basic concepts in Parasitology.
- **III.** Introduction to the laboratory and laboratory instruments.
- **IV.** Ethical principles in Medical Parasitology.
- **V.** Ethical principles in Parasitology animal research.
- VI. Biosystematics.
- VII. Structure, data presentation and referencing in scientific papers.
- **VIII.** Good scientific writing practices in Health.
- **IX.** Bibliographic research.
- **X.** Basic principles of molecular biology and bioinformatics applied to Parasitology.
- **XI.** Discussion on the topic of Medical Parasitology.



INTRODUCTION TO MEDICAL PARASITOLOGY

Teaching methodologies (including assessment):

This CU is organized in 8 lectures, 2 practical sessions and four tutorial orientations, in a total of 14 hours of contact. Lecture handouts and formative assessment are available in the Moodle platform.

Student assessment will be based on the following elements:

- A written exam note.
- Training exercises on the Moodle platform.

Ratings:

- The evaluative components, including the exam and the training exercises, will have a classification between 0 and 20 values.

Calculation of the final classification:

- exam classification x 0.9 + average classification of training exercises x 0.1

Approval/failure:

- Students with classifications below 10 in the final classification will be disapproved.

In order to improve the grade, or in case of failure, students will have to take a new exam in the 2nd period, or special period (see IHMT Assessment Regulations). The ranking of these periods is based on the exam grade only.

References for consultation / mandatory existence:

- Gordon C. Cook ed. (2003) Manson's Tropical Diseases. 21st ed. Elsevier Science. London.
- Schmidt and Roberts. Foundations of Parasitology, McGrawHill.
- Alberts, B., Bray, D., Lewis, J., Raff, M., Roberts, K. and Watson, J. D. eds. (1994) Molecular biology of the cell. 3rd edition. Garland, NY.
- Scientific writing and publishing results. Tropical Biology Association, UK. 14pg http://www.bvssp.fsp.usp.br:8080/html/pt/paginas/guia/i_cap_03.htm
- Cantacessi, C., Campbell, B.E., Jex, A.R., Young, N.D., Hall, R.S., Ranganathan, S., Gasser, R.B. (2012) Bioinformatics meets parasitology. Parasite Immunol. 34(5):26575.