INTRODUCTION TO MEDICAL PARASITOLOGY

CU characterization:

CU name:
Introduction to Medical Parasitology

Scientific area acronym:
PA

Duration:
Semiannual

Working hours:
41

Contact hours:
16.5

% Distance contact hours
0

ECTS:
2

Observations:
6 T ; 4 TP ; 4.5 OT; 2 O (assessment)
T - Theoretical; TP - Theoretical and Practical; OT - Tutorial Teaching; O – Other

Teacher in charge and respective teaching load in the CU:
Isabel Maurício – 5 hours

Other teachers and respective teaching load in the CU:
Ana Domingos - 1 hours
Paulo Almeida - 8 hours
Gabriela Santos-Gomes - 3 hours
Carla Sousa - 1,5 hours
Dinora Lopes - 1 hours
Claudia Conceição - 1 hours

Intended learning outcomes (knowledge, skills and competences to be developed by the students):
At the end of this course students should be able to:

1. Define the discipline of Medical Parasitology and describe the importance of parasites in human health.
2. Describe the major groups of parasites and indicate their taxonomic classification.
3. Correctly use terms and concepts used in parasitology.
4. Use the rules of Biosystematics 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 referencing forms.
9. Indicate the rules for communicating scientific results in Health in a scientific way.
10. Use essential molecular biology terms and concepts correctly.
11. Suggest molecular biology methods for specific goals.
12. Choose important bioinformatic resources in parasitology.
13. Present a current topic on one or more parasitic diseases of medical importance, including their control.

Syllabus:

1. Presentation of the UC. Objectives of the UC. Medical Parasitology.
2. Terminology and basic concepts in Parasitology.
3. Introduction to laboratory and laboratory instruments.
4. Ethical principles in Medical Parasitology.
5. Ethical principles in Parasitology - animal research.
6. Biosystematics.
7. Structure, presentation of data and referencing in scientific papers.
8. Good practices of scientific writing in Health.
9. Bibliographic research.
10. Basic principles of molecular biology and bioinformatics applied to Parasitology.
11. Seminar on the theme of Parasitology - presentations by students.

Evidence of the syllabus coherence with the CU intended learning outcomes:

The syllabus includes the main topics on which students should show new acquired knowledge and some critical capacity, as described in the learning objectives of this course.

Teaching/learning methodologies articulated with pedagogical model:

The Curricular Unit is organized in five theoretical classes, three theoretical-practical classes and three tutorial orientation, in a total of 16.5 contact hours.
Class documents, study aids and formative assessment exercises are available on the Moodle platform.

Assessment:

The evaluation of students will be carried out based on the following elements:
- The written exam score.
- Formative exercises on the Moodle platform.

- Formative seminar

Grading:

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

Calculation of the final grade:

- exam grade x 0.9 + grade of the average of the training exercises x 0.05 + grade of the training seminar x 0.05

Pass/fail:

- Students who have grades lower than 10 in the final grade will fail.

To improve the grade, or in case of failure, students will have to take a new exam in the 2nd season, or special period (see IHMT Evaluation Regulation). The classification of these seasons is based only on the exam grade.

Evidence of the teaching methodologies coherence with the CU intended learning outcomes:

This course includes lectures, theoretical and theoretical-practical, to introduce students to basic concepts and the most important topics about parasitology, as well as related disciplines, but which are not explicitly taught during the master's degree and which are important for the understanding of articles and topics, such as biosystematics, bioinformatics and molecular biology, and transversal skills, such as scientific communication, the principles of ethics and laboratory instruments. In addition, it is intended that the student develops and shows some critical spirit. In this sense, a multidisciplinary teaching methodology is privileged, with formative assessment, in class and through the Moodle platform, which should contribute to the learning process, and which will be evaluated in the summative assessment in the form of an exam.

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.