

MEDICINE FUNDAMENTALS II

Code: 11402

Main Scientific Area: Mathematics and Statistics

Lecturer: João Filipe Pedreira de Oliveira

Language of Instruction: Portuguese

Regime: S2

Contact Hours: 60h Total Workload: 100h

ECTS: 6,0

Objectives

The main goal of this subject, as a crucial area in health sciences, is to acquire, develop and consolidate fundamental knowledge on both morphology and function of the human body, as demanded to any professional in health. It is intended to point out the practical interest of this knowledge, avoiding an encyclopedic program, and focusing the real needs of actual medicine that a future professional may need. The curiosity of the students will be challenged in order to stimulate their critical spirit regarding examples of daily life physiological phenomena.

Learning Outcomes

The program under study will reach a considerable scientific level, so that the student may connect themes and understand the functioning of the human body. This will allow the student to face the problems in the future easily, building up solutions on top knowledge obtained in the classroom. Moreover, he will be able to bridge the fundamentals of human body function and application of existing and emergent technologies.

Course Contents

The program contents are:

Muscle system;

Circulatory system;

Lymphatic system;

Respiratory system;

Gastrointestinal system;

Urinary system;

Endocrine system;

Reproduction system;

Recommended Bibliography

E. P. Widmaier, H. Raff, e K. T. Strang, Vander's Human Physiology

Dee Unglaub Silverthorn - Fisiologia Humana - Uma Abordagem Integrada

Thieme, Color Atlas of Physiology

Learning and Teaching Methods

The syllabus provides the foundations of Anatomy and Biochemistry to a better understanding of the teaching topics of Physiology. These will be supplemented with laboratory experience of teacher in the class that will be shared in several ways. At the end of the course, students should have a knowledge that will allow the better resolution of technology problems through the creation of systems based in the knowledge and technology experience obtained in other subjects in the course.

Assessment Methods

The evaluation is made by 2 written tests, a public presentation of a selected topic (prepared in groups of 2-3), and the attendance to the classes. The minimum grade in any of the tests is 6 (out of 20). The minimum grade to be obtained in the presentations is 10 (out of 20).

Missing one of the three evaluations refers directly to the final exam in the end of the semester.