

|                  |                                |               |                |                    |      |
|------------------|--------------------------------|---------------|----------------|--------------------|------|
| Course Unit      | Clinical Pathology I           |               | Field of study | Expertise Sciences |      |
| Bachelor in      | Biomedical Laboratory Sciences |               | School         | School of Health   |      |
| Academic Year    | 2022/2023                      | Year of study | 2              | Level              | 1-2  |
| Type             | Semestral                      | Semester      | 1              | ECTS credits       | 5.0  |
| Code             | 9995-550-2106-00-22            |               |                |                    |      |
| Workload (hours) | 135                            | Contact hours | T -            | TP 52              | PL - |
|                  |                                |               | TC -           | S -                | E -  |
|                  |                                |               | OT 8           | O -                |      |

T - Lectures; TP - Lectures and problem-solving; PL - Problem-solving, project or laboratory; TC - Fieldwork; S - Seminar; E - Placement; OT - Tutorial; O - Other

Name(s) of lecturer(s) Raul Fernando Louro de Sousa

### Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:

1. To describe general pathological phenomena of the human organism with regard to the etiology, prevalence, pathogenesis, clinical and diagnosis of diseases
2. To know the physiopathology, most prevalent diseases and main laboratory tests for the diagnosis of the pathology of the cardiovascular and hematopoietic system.

### Prerequisites

Before the course unit the learner is expected to be able to:

1. To know the anatomy and physiology of the organic systems to be studied
2. Relate the anatomy and physiology of the organic systems to be studied

### Course contents

Cellular Pathology. Injury and cellular necrosis. Cellular adaptations to the lesion. Aging and Death. Inflammation. Neoplasia. Infectious Diseases Diseases of the Heart Diseases of the Blood Vessels. Blood and Lymphoid Tissue Diseases.

### Course contents (extended version)

1. Concept and Division of Pathology; Clinical history; Complementary exams.
2. Cell injury and necrosis; Cellular adaptations to the lesion; Aging and Death.
3. Chemical mediators. Vascular changes. Morphological Patterns of Acute and Chronic Inflammation
4. Neoplasia. Characteristics of Benign and Malignant Neoplasms. Molecular Bases of Cancer
5. Infectious diseases. HIV infection; Tuberculosis; Meningitis; Infective endocarditis
6. Heart disease. Cardiac insufficiency; Ischemic heart disease; Hypertensive Cardiopathy
7. Blood Vessel Diseases Atherosclerosis; Hypertensive vascular disease; Aneurysms.
8. Pathology of the Blood and Lymphoid Tissue. Anemias. Coagulation Disorders.

### Recommended reading

1. Kumar, Vinay, Cotran, Ramizi S. , & Robbins, Stanley L. (Eds. ). (2003). Robbins Patologia Básica (7ª ed. ): Saunders Elsevier Science.
2. Rubin, Raphael, & Strayer, David S. (Eds. ). (2005). Patologia: Bases Clinicopatológicas de Medicina (4ª ed. ): Guanabara Brasil.
3. Sergio, J. Silveira, Coutinho, Isabel, & Marques, Sandra (Eds. ). (2002). Fundamentos de Patologia para Técnicos de Saúde (2ª ed. ): Lusociência
4. Pinto, Anabela Mota (2007). Fisiopatologia: Fundamentos e Aplicações (2ª ed. ): Lidel

### Teaching and learning methods

The teaching method is essentially expositive with lecturing of the physiopathological mechanisms of diseases and pathologies affecting the human organ systems, with a special focus on complementary diagnostic exams

### Assessment methods

- Final - (Regular, Student Worker) (Final, Supplementary, Special)
- Final Written Exam - 100%

### Language of instruction

Portuguese

### Electronic validation

|                              |                                 |                                  |                                       |
|------------------------------|---------------------------------|----------------------------------|---------------------------------------|
| Raul Fernando Louro de Sousa | Maria Cristina Martins Teixeira | Ana Maria Nunes Português Galvão | Adília Maria Pires da Silva Fernandes |
| 30-10-2022                   | 01-11-2022                      | 02-11-2022                       | 03-11-2022                            |