



Course Unit: 956326 – Exercise Physiology II

Year 2 Semester 3 ISCED Code: 1014 ECTS: 4

Type of Course Unit: Compulsory Delivery Mode: Face-to-face Language of Instruction: Portuguese

COURSE COORDINATOR: Nuno Eduardo Marques de Loureiro

HOURS OF WORK

| TOTAL HOURS | Contact Hours | | | | | | | | Hours in autonomous work |
|-------------|---------------|---------------------|-------------------------------|------------|---------|------------|-------------------|-------|--------------------------|
| | Theory | Theory and practice | Practical and laboratory work | Field work | Seminar | Internship | Tutorial guidance | Other | |
| 100 | 10 | 10 | 10 | | | | | | 70 |

Prerequisites (if applicable): <<Max 500 characters with spaces>>

LEARNING OUTCOMES (knowledge, skills and competence)

- Know the main endocrine changes in exercise
- Know the main features ergogenic
- Explain the main implications of the use of ergogenic resources
- Know the main physiological changes during exercise training in extreme environmental conditions

CONTENTS

- Chapter I -System endocrine: organization and responses to exercise
- Section I - hormonal regulation of the exercise
- Section II - ergogenic Resources
- Section III - Environmental Influences on performance
- Chapter 2 Thermoregulation and exercise
- Chapter 3 Exercises in the heat
- Chapter 5 exercise in the cold
- Chapter 4 - Exercise in medium and high altitudes
- Chapter 5 - sports Diving

DEMONSTRATION OF THE CONTENTS COHERENCE WITH THE COURSE UNIT'S LEARNING OUTCOMES

This curricular unit provides in its organization the systematization of the knowledge related to the fundamentals of the study of processes that underpins all knowledge in this discipline in the phenomenon of physiology as a support to training and sports preparation.

When performing physical exercise one can verify a chain of physiological phenomena that are complementary and which are the basis of sporting success or failure.

The main physiological patterns will be covered and the way they change according to the different types of exercise

TEACHING METHODOLOGIES

<During the lessons the work might assume the following dimensions:

- Expositive lessons
- Individual papers
- Work Group

DEMONSTRATION OF THE COHERENCE BETWEEN THE TEACHING METHODOLOGIES AND THE LEARNING OUTCOMES

The theoretical and practical nature of this curricular unit justifies the use, in a complementary way, of active methodologies with a strong practical component associated with theoretical exposition frequently used with audiovisual media, as well as bibliographical research.

The presentation practice by the students to the group-class of the conducted research results, in an autonomous way and supervised by the teacher, is recurrent.

EVALUATION METHODS

The assessment in this curricular unit consists of: normal season – Written test and work group.. Appeal season – written examination

MAIN BIBLIOGRAPHY

Haff, G. & Dumke, C. (2012) Laboratory Manual for Exercise Physiology. Champaign. Human Kinetics

McArdle, W., Katch, F. & Katch, V. (2002) Fundamentos da Fisiologia do Exercício. São Paulo. Guanabara Koogan

Wilmore, J. & Costill, D., Kenney, W. (2017) fisiologia do esporte e do exercício. São Paulo. Manole

Year of implementation: 2021/2022 | Date of approval by the Technical-Scientific Board: 2021-07-23