

Course Unit: 400340 - Occupational Biomechanics II

Year 1 Semester 2 ISCED Code: 0915 ECTS: 4,5

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

COURSE COORDINATOR: Patrícia Alexandra Rodrigues Santos

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	
112,5	40	12	8	-	-	-	-	-	36,5

Prerequisites (if applicable):

LEARNING OUTCOMES (knowledge, skills and competence)

- A. Identify and characterize the movements of the different segments of the human body;
- B. Analyze the human movement during occupation performance. Competences:
- Shows knowledge and understanding of the structures and functions of the human body on a biological and physical level and of the way those structures interact with the activity and task performance;
 - Solves problems through logical thinking and critical analysis and of creativity, showing ability to produce assertive conclusions and sustained decisions.

CONTENTS

1. Functional anatomy
 - Superior members: anatomic characteristics of the articulations, muscular actions, strength and prehensions
 - Torso: anatomic and functional characteristic of articulations, muscular actions, strength and posture.
 - Inferior members: anatomic characteristics of the articulations, muscular actions, strength and march
2. Mechanical analysis of the human movement during occupational performance.

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

The syllabus linked to the goals (between brackets) are:

1. Functional anatomy (A)
 - Superior members: anatomic characteristics of the articulations, muscular actions, strength and prehensions
 - Torso: anatomic and functional characteristic of articulations, muscular actions, strength and posture.
 - Inferior members: anatomic characteristics of the articulations, muscular actions, strength and march
2. Mechanical analysis of the human movement during occupational performance. (B)

TEACHING METHODOLOGIES

- A Theoretical lessons using the expositive method;
- B Theoretical and practical lessons with problem resolution and discussion;

C Group work with classroom presentation.

Evaluation includes written evaluation and group work with oral and written presentation.

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

The curricular unit's objectives linked to the teaching methodologies (between brackets) are:

A. Identify and characterize the movements of the different segments of the human body; (A; B)

B. Analyze the human movement during occupation performance. (A, B e C).

EVALUATION METHODS

Continuous Assessment (CA) - 1 individual written test (functional anatomy); 1 group work (mechanical analysis of human movement during occupational performance). In each of these evaluations the minimum admissible rating is 8 points.

Course unit (CU) approval: minimum rating of 10 points, in the weighted average of the evaluation tests. Only the final CU classification is obtained by rounding.

Final Assessment in Normal Season (NS) - Applies to students who do not opt for CA (same type of assessment methods; minimum admissible rating: 10 points for each assessment method). Only the final CU classification is obtained by rounding.

Final Assessment in Resouse Season (RS) - Applies to students who have not passed CA and Final Assessment in NS (same type of assessment methods; minimum admissible rating: 10 points for each assessment method. Improvements are contemplated in Final Assessment at RS

MAIN BIBLIOGRAPHY

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Esperança Pina, J. A. (2017). Anatomia humana da locomoção (5ª ed.). Lisboa: Edições Lidel.

Kapanji, A. (2019). The physiology of the joints- vol 1:the upper limb (7ª ed). Scotland: Handspring Publishing Limited.

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Vanputte, C., Russo, A., & Regon, J. (2016). Anatomia e fisiologia de Seeley (10ª ed.). Porto Alegre: AMGH Editora, Ltda.

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