Information about the subject

Degree: Bachelor of Science Degree in Occupational Therapy

Faculty: Faculty of Psychology

Code: 1121102 **Name:** Kinesiology

Credits: 6,00 **ECTS Year:** 1 **Semester:** 2

Module: BASIC TRAINING MODULE

Subject Matter: Physiology **Type:** Basic Formation

Field of knowledge: Health Sciences

Department: Occupational Sciences

Type of learning: Classroom-based learning

Languages in which it is taught: Spanish

Lecturer/-s:

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Module organization

BASIC TRAINING MODULE

Subject Matter	ECTS	Subject	ECTS	Year/semester
Human Anatomy	6,00	Structure and function of the human body I	6,00	1/1
Physiology	12,00	Kinesiology	6,00	1/2
		Structure and function of the human body II	6,00	1/2
Psychology	24,00	Basic Psychological Processes	6,00	1/2
		Developmental Psychology I	6,00	2/1
		Developmental Psychology II	6,00	2/2
		Psychology of the Personality	6,00	1/1
Anthropology	6,00	Anthropology	6,00	1/1
Social Moral-Deontology	6,00	Social Morality - Deontology	6,00	2/1
Science, Reason and Faith	6,00	Science, Reason and Faith	6,00	1/2

Recommended knowledge

There are no prerequisites. It is advisable to have studied and passed: Structure and Function of the human body 1

Learning outcomes

At the end of the course, the student must be able to prove that he/she has acquired the following learning outcomes:

R1 The student knows and is able to appropiately use the subject-specific terminology.

R2 The student is able to describe, relate and synthesize the fundamental concepts of Kinesiology.

R3 The student knows and appropiately applies the biomechanical principles of human body movement in the analysis of occupational performance.

R4 The student identifies and handles the techniques and instruments necessary to carry out an adequate kinesiological exploration of the locomotive system and is able to transcribe the results.

R5 The student is able to evaluate qualitatively and quantitatively the results of the biomechanical analysis of the main activities of daily life, recognizing and interpreting the signs of function and dysfunction.

Competencies

Depending on the learning outcomes, the competencies to which the subject contributes are (please score from 1 to 4, being 4 the highest score):

GENERAL		Weighting			
		1	2	3	4
CG4	To recognise one's own limitations and the need to maintain and keep up to date one's professional competence, focusing specially on the importance of autonomous learning of knowledge and techniques and the desire for quality.		x		
CG5	To know, value critically and use the sources of information in order to obtain, organise, interpret and communicate the scientific, sanitary, socio-sanitary and information, preserving the confidentiality of the data.		x		
CG7	To understand and recognise the interrelationship between the concepts of wellbeing, health, significant occupation, dignity and participation.		x		
CG8	To understand and recognise the importance of contextual factors as determiners of occupational dysfunction and promote the right of individual/populations to satisfy their occupational needs.		x		
CG17	To recognise the influence of individual, religious, and cultural differences, as well as the customs about occupation and participation	x			
CG18	To acquire and develop skills and practical experience in a socio-sanitary and community context				x
CG22	To establish an assertive interpersonal communication with all the interlocutors that is relevant during the Occupational Therapy process.		x		
CG24	To transmit written and/or oral information to a specialised audience as well as a non-specialised one.		x		

SPECIFIC		Weighting			
		1	2	3	4

CE25	To know and understand the structure and functioning of the human body so students can evaluate, synthesise and apply Occupational Therapy treatments.			x

Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
R1, R2, R3, R4, R5	50,00%	Written tests: Summative and final theoretical-practical test (open questions, objective test questions, truncated test, etc.) Preparation of field work memoranda, practical case solutions, single cases.
R1, R2, R3, R4, R5	30,00%	Presentation of group and individual works.
R1, R2, R3, R4, R5	20,00%	Individual monitoring of attendance at face-to-face sessions and active participation in theoretical and practical classes, seminars and tutorials.

Observations

ATTENDANCE AND EVALUATION MODALITIES

Students may choose between two evaluation modalities for the course: **continuous assessment** and **single assessment**. Both allow for the accreditation of the same learning outcomes, though they are structured differently depending on the student's level of attendance and dedication.

1. Continuous Assessment

This is intended for students who can follow the regular pace of the course, actively participating in lectures, seminars, and in-person activities.

A **minimum of 70% attendance** at in-person sessions is required in order to qualify for this modality.

Assessment will be distributed among **theoretical tests, practical activities, individual or group assignments, active participation in class, and/or self-assessments**, as determined by the teaching staff.

Students must commit to the chosen modality. Switching to the single assessment will not be allowed unless justified and authorized by the responsible instructor.

2. Single Assessment

This modality is aimed at students who, due to **justified and documented reasons** (such as paid work, caregiving responsibilities, or other significant reasons), cannot meet the required attendance minimum.

The request must be submitted **in writing and with justification** to the course instructor within the **first three weeks** of the semester. The response, whether acceptance or rejection, will be

communicated via the same channel with appropriate justification.
This modality does **not consist of a single test**, but rather a **set of activities** designed to assess all the learning outcomes established in the Course Guide.
The structure of the single assessment in this course will be as follows:

·**Theoretical exam (60%)**

·Fundamental knowledge will be evaluated through written and/or oral tests, including essay questions, multiple-choice questions, or a combination of both.

·**Practical exam and additional assignments (40%)**

·This section will include:

·A **practical test** (oral, written, or case-based), aimed at evaluating the application of content in professional or simulated contexts.

·**Additional independent assignments**, with a heavier workload than those in the continuous assessment. These may include case analyses, proposal development, critical literature reviews, intervention designs, or other tasks that demonstrate practical skills, analytical capacity, and critical application of knowledge.

General Conditions for Both Modalities

·**All evaluable components (theoretical and practical/work)** must be passed separately in order to pass the course.

·**Academic honesty** is a fundamental requirement. The use of external sources or artificial intelligence tools must be properly cited, indicating their function (consultation, writing, organization, etc.) and the section in which they were used.

·**Plagiarism, impersonation of authorship, or the improper use of technological tools** will result in sanctions in accordance with current academic regulations.

·The **dates, formats, and adaptations** of assessments will be communicated in advance via the institutional platform.

USE OF ARTIFICIAL INTELLIGENCE TOOLS

According to the official document *"Principles for the Use of Artificial Intelligence at the Catholic University of Valencia" (V.1, 2025)*, the use of AI tools in the academic environment must be **ethical, transparent, and responsible**, always in the service of learning, critical thinking, and the holistic education of the student.
These tools can be a helpful support when used with discernment, without replacing personal effort or compromising intellectual authorship. Therefore, the following specific conditions are established for their use in this course:

Students may use AI for:

·Clarifying doubts about biomechanics and human movement.
·Assisted learning: complementary explanations or self-assessment exercises.
·Creating study aids such as outlines or concept maps.
·Reviewing report writing, as long as the content is original.

Students may not use AI for:

·Writing functional assessments, kinematic analyses, or clinical interventions.

·Recording, transcribing, or summarizing practical activities without authorization.
·Submitting AI-generated content as their own.
·Entering data from real or simulated patients into AI tools.

Citation and attribution criteria:
Students must indicate **which AI tool was used**, **for what purpose** (e.g., source consultation, style improvement), and **in which specific part** of the work it was applied.

In accordance with the regulations governing the assessment and grading of subjects in force at UCV, the distinction of "Matrícula de Honor" (Honours with Distinction) may be awarded to students who have achieved a grade of 9.0 or higher. The number of "Matrículas de Honor" (Honours with Distinction) may not exceed five percent of the students enrolled in the group for the corresponding academic year, unless the number of enrolled students is fewer than 20, in which case a single "Matrícula de Honor" (Honours with Distinction) may be awarded.
Exceptionally, these distinctions may be assigned globally across different groups of the same subject. Nevertheless, the total number of distinctions awarded will be the same as if they were assigned by group, but they may be distributed among all students based on a common criterion, regardless of the group to which they belong. The criteria for awarding "Matrícula de Honor" (Honours with Distinction) will be determined according to the guidelines stipulated by the professor responsible for the course, as detailed in the "Observations" section of the evaluation system in the course guide.

Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

M1	ON-CAMPUS CLASS
M2	PRACTICAL CLASSES
M3	SEMINAR
M4	GROUP PRESENTATION OF PAPERS
M5	OFFICE ASSISTANCE
M6	ASSESSMENT
M7	GROUP WORK

M8 INDEPENDENT WORK

IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
ON-CAMPUS CLASS: Teacher presentation of contents, analysis of competences, explanation and in-class display of skills, abilities and knowledge. M1	R1, R2, R3, R4, R5	29,00	1,16
PRACTICAL CLASSES: Group work sessions supervised by the professor. Case studies, diagnostic tests, problems, field work, computer room, visits, data search, libraries, on-line, Internet, etc. Meaningful construction of knowledge through interaction and student activity. M2	R3, R4, R5	10,00	0,40
SEMINAR: Supervised monographic sessions with shared participation M3	R4, R5	7,50	0,30
GROUP PRESENTATION OF PAPERS: Application of multidisciplinary knowledge M4	R4	7,50	0,30
OFFICE ASSISTANCE: Personalized and small group attention. Period of instruction and /or orientation carried out by a tutor to review and discuss materials and topics presented in classes, seminars, eadings, papers, etc. M5	R1, R2, R3, R4, R5	3,00	0,12
ASSESSMENT: Set of oral and/or written tests used in initial, formative or additive assessment of the student M6	R1, R2, R3, R4, R5	3,00	0,12
TOTAL		**60,00**	**2,40**

LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
GROUP WORK: Group preparation of readings, essays, problem solving, seminars, papers, reports, etc. to be presented or submitted in theoretical lectures, practical and/or small-group tutoring sessions. Work done on the university e-learning platform (www.plataforma.ucv.es) M7	R1, R2, R3, R4, R5	40,00	1,60
INDEPENDENT WORK: Student study: Group Individual preparation of readings, essays, problem solving, seminars, papers, reports, etc. to be presented or submitted in theoretical lectures, practical and/or small-group tutoring sessions. Work done on the university e-learning platform (www.plataforma.ucv.es) M8	R1, R2, R3, R4, R5	50,00	2,00
TOTAL		**90,00**	**3,60**

Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
Didactic Unit 0: Introduction	TOPIC 0: Biomechanical Model and Its Application in Occupational Therapy
DIDACTIC UNIT I: Foundations of Kinesiology and Biomechanics and its application to occupational therapy.	TOPIC 1: Biomecanics Model TOPIC 2: Joint movement TOPIC 3: Muscle function TOPIC 4: Bases of joint physiology, movement, balance and stability.
DIDACTIC UNIT II: Analytical kinesiology of the upper limb.	TOPIC 5. Joint movement and muscle function in shoulder. TOPIC 6. Joint movement and muscle function in Elbow and forearm. TOPIC 7. Joint movement and muscle function in Wrist. TOPIC 8. Joint movement and muscle function in the Hand.
DIDACTIC UNIT III: Analytical kinesiology in rachis and lower limb.	TOPIC 9. Joint movement and muscle function in Cervical, Thoracic and Lumbar Rachis. TOPIC 10. Joint movement and muscle function in Hip, Knee and Foot.
DIDACTIC UNIT IV: Kinesiological analysis of basic motor skills.	TOPIC 11. Posture: functional interaction pelvis and trunk. TOPIC 12. Kinesiology of the human gait. TOPIC 13. Biomechanical analysis in Daily Living Activities

Temporary organization of learning:

Block of content	Number of sessions	Hours
Didactic Unit 0: Introduction	2,00	4,00
DIDACTIC UNIT I: Foundations of Kinesiology and Biomechanics and its application to occupational therapy.	4,00	8,00
DIDACTIC UNIT II: Analytical kinesiology of the upper limb.	8,00	16,00
DIDACTIC UNIT III: Analytical kinesiology in rachis and lower limb.	8,00	16,00
DIDACTIC UNIT IV: Kinesiological analysis of basic motor skills.	8,00	16,00

References

The materials for the preparation of the written test will be provided by the professor through the virtual UCV Campus.

Basic bibliography

·Kapandji A. (2011) *Cuadernos de Fisiología articular*. Médica Panamericana.

·Keough, Sain y Roller (2017). *Kinesiology for the Occupational Therapy Assistant: Essential Components of Function and Movement.* SLACK Incorporated.

·Lippert, L. S., & Minor, M. A. D. (2021). *Clinical kinesiology and anatomy* (7th ed.). F.A. Davis.

·Neumann, D. A. (2022). *Kinesiology of the musculoskeletal system: Foundations for rehabilitation* (4th ed.). Elsevier.

·Rybski M. (2012). *Kinesiology for Occupational Therapy*. SLACK Incorporated.

·Smith, L. K. (2021). *Brunnstrom's clinical kinesiology* (6th ed.). F.A. Davis.

Further reading

·Baumgarther T., Jackson A., Mahar M. & Rowe D. (2016). *Measurement for evaluation in kinesiology*. Jones y Barlett Learning.

·Cano, Martínez & Miengolarra (2016). *Control y aprendizaje motor. Fundamentos, desarrollo y reeducación del movimiento humano*. Madrid: Editorial Médica Panamericana.

·Greene, D.P. & Roberts, S.L. (2005). *Kinesiology. Movement in the context of activity*. Elsevier Mosby.

·Hislop, H.J. & Montgomery, J. (2003). Daniels & Worthingham. *Técnicas de balance muscular.* Elsevier, Saunders.

·Kendall, F.P. & Kendall, E. (2000). *Músculos. Pruebas, funciones y dolor postural*. Marbán Libros, S.L.

·Kielhofner G. (2006). *Fundamentos conceptuales de la terapia ocupacional*. Médica Panamericana.

·Muscolino J. (2011). *Kinesiology. The skeletal system and muscle function*. Elsevier Mosby.