



## Information about the subject

**Degree:** Bachelor of Science Degree in Occupational Therapy

**Faculty:** Faculty of Psychology

**Code:** 1121103 **Name:** Structure and function of the human body I

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

**Module:** BASIC TRAINING MODULE

**Subject Matter:** Human Anatomy **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:**

1121 Cesar Rubio Belmonte (**Responsible Lecturer**)

cesar.rubio@ucv.es

María Inmaculada Aragonés Barberá

inmaculada.aragones@ucv.es



## 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

Not required.



## 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      To know the morphological basis of the human body from a functional perspective.
- R2      To know and properly use the subject-specific terminology.
- R3      To use, interpret and critically assess the scientific documents on which Human Anatomy is based.



## 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
CG1	To recognise the key elements of the profession, including ethical principles, legal responsibilities, the focus on the individual and population respecting their autonomy, and the oath of confidentiality.			X	
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
CG6	To understand the conceptual foundations of the occupational nature of the human being and the carrying out of his occupations throughout the cycle of life.			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			
CE26 To know and understand the physio-pathological process in every moment of the life cycle, from infancy to old age, identifying the problems and preventive and clinical aspects of the person, in health as well as in illness.			X	



## Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
R1, R2, R3	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	30,00%	Presentation of group and individual works.
R1, R2, R3	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 assessment modalities for the course: **continuous assessment** and **single assessment**. Both modalities certify the same learning outcomes, although they are structured differently depending on the student's level of attendance and engagement.

##### 1. Continuous Assessment

This is designed 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** in face-to-face sessions is required to qualify for this modality.

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

Students must commit to the selected modality. A switch to single assessment will only be allowed with **justified reasons and approval from the responsible instructor**.

##### 2. Single Assessment

This modality is intended for students who, due to **justified and documented reasons** (such as paid employment, caregiving responsibilities, or other significant situations), are unable to meet the minimum attendance requirement.

Requests must be submitted **in writing with proper justification** to the course instructor **within the first three weeks of the semester**. A response will be provided via the same method, with a reasoned acceptance or denial.



This modality does **not consist of a single exam**, but of a set of activities designed to assess **all learning outcomes** stated in the Course Guide.

The structure of the single assessment in this course will be as follows:

- **Theoretical Exam (60%)** Fundamental knowledge will be assessed through a written and/or oral test, with 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), focused on evaluating the application of course content in professional or simulated settings.
  - **Additional independent assignments**, which carry a heavier workload than those in continuous assessment. These may include case analyses, proposal development, critical literature reviews, intervention designs, or other tasks that demonstrate practical skills, analytical ability, and critical application of knowledge.

### General Conditions for Both Modalities

- Students must **pass all assessable components separately** (theoretical and practical/assignments) 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, specifying their role (e.g., consultation, writing, organization) and the section where they were used.
- **Plagiarism, impersonation of authorship, or misuse of technological tools** will result in disciplinary action in accordance with current academic regulations.
- **Dates, formats, and adaptations** of evaluations will be announced 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 setting must be **ethical, transparent, and responsible**, always serving the goals of learning, critical thinking, and the comprehensive education of students.

These tools can be a helpful support when used with discernment, without replacing personal effort or compromising intellectual authorship. Therefore, the following specific conditions apply to their use in this course:

#### Students may use AI for:

- Clarifying questions about anatomy and physiology to support their study.
- Creating diagrams, maps, or comparative charts for memorization.
- Reviewing their own texts to improve clarity or correctness.

#### Students may not use AI for:

- Writing responses for graded assignments.
- Transcribing classes or seminars without instructor permission.
- Replacing their own creation of anatomical drawings or structure identification.
- Sharing course materials or personal data with AI tools.

### Citation and Attribution Criteria

Any use of AI must be clearly indicated, specifying the tool used, its purpose, and the specific section of the work in which 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	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	R2, R3	10,00	0,40
SEMINAR: Supervised monographic sessions with shared participation M3	R1	7,50	0,30
GROUP PRESENTATION OF PAPERS: Application of multidisciplinary knowledge M4	R3	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	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	3,00	0,12
<b>TOTAL</b>		<b>60,00</b>	<b>2,40</b>



## 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 ( <a href="http://www.plataforma.ucv.es">www.plataforma.ucv.es</a> ) M7	R3	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 ( <a href="http://www.plataforma.ucv.es">www.plataforma.ucv.es</a> ) M8	R1, R2, R3	50,00	2,00
<b>TOTAL</b>		<b>90,00</b>	<b>3,60</b>



## Description of the contents

Description of the necessary contents to acquire the learning outcomes.

### Theoretical contents:

Content block	Contents
INTRODUCTION	1 .- Anatomy: Concepts, terminology. Historical Review
CYTOLOGY	2 .- Cell. Definition. General. Components .. 3 .- Process of cell division. 4 .- Organization: Tissues, Organs, Devices and Systems
EMBRYOLOGY	5 .-. Fertilization, segmentation, morula, blastula and gastrula 6 .-. Trilaminar embryo. Celomación .. Derived from the leaves blastodermic. 7 .- implantation, Implantation and placentation
LOCOMOTOR	8 .- Concept: Organization and components: bones, muscles and joints. Tendons, ligaments and fascia. Bone tissue: bone growth and reconstruction. 9 .- Types of joint. Classification and functional dynamics 10 .- Spine: Organization. Vertebrae types and differentiation 11 .- ribcage. 12 .- osteology and joints of the upper extremity and shoulder girdle 13 .- osteology and joints of the lower extremity and pelvic girdle 14.-Bones of the skull. Vault and skull base. Facial bones. 15 .- Muscles of the trunk: Retrosoma 16 .- Trunk Muscles: Chest and Abdomen 17 .- I Muscles of Upper Limb 18 .- Muscles of Upper Limb II 19 .- Lower Limb Muscles I 20 .- Lower Limb Muscles II



## CIRCULATORY SYSTEM

- 21.- Organization and components. Blood Circulation. Major and Minor Traffic Circulation.
- 22.- Heart: external and internal configuration. Vascularization and innervation. Pericardium.
- 23.-pulmonary vessels. Aorta and main branches. Vessels in the head and neck. Terminal branches of the aorta. Iliac vessels.
- 24.-Vessels of the upper limb. Lower limb vessels.
- 25.-Veins. Cavas. Portal System
- 26.- Lymphatic system.

## SPLANCHNOLOGY

### A. RESPIRATORY SYSTEM

- 27. Larynx. Phonation apparatus.
- 28. Trachea and bronchial tree.
- 29. Lungs. Pleurae. Mediastinum.

### B. DIGESTIVE SYSTEM

- 30. Oral cavity. Tongue. Teeth. Salivary glands.
- 31. Pharynx. Esophagus. Stomach.
- 32. Small intestine. Large intestine.
- 33. Exocrine and endocrine pancreas.

### C. UROGENITAL SYSTEM

- 34. Kidneys and urinary tract.
- 35. Male genital system.
- 36. Female genital system.

### D. OTHERS

- 37. Liver
- 38. Pancreas
- 39. Internal gonads



## NERVOUS SYSTEM AND SENSES

40.- Introduction to the study of SN: Organization. Nervous tissue. Neurons and Glia.

### I. - S.N. CENTRAL

41. Spinal cord. Grey substance sensory and motor. White matter. Ascending and descending pathways. Reflexes. Muscle tone.

42. Brainstem. Cranial nerves.

43. Cerebellum.

44. Diencephalon.

45. Cortex. Areas motor, sensory and association.

46. Pyramidal system. Extrapyrarnidal system.

Movimiento. Vías overall coordination of sensory conduction in the CNS.

47. Meninges. Cerebrospinal fluid. Vascularization of the CNS.

### II.- S.N. PERIPHERAL

48.-spinal nerves. Posterior branches.

49.-brachial plexus.

50.-intercostal nerves.

51.-lumbar plexus. Sacro.Plexo pudendal plexus.

### III.- SENSES

52.- Anatomy Oran overall vision

53.- General anatomy of Oran hearing and balance

54.- General anatomy of Oranais of smell and taste.

55.- Skin and appendages. Sense of touch.

## ENDOCRINE

56.- Concept, generalities. Hormone and Feed-Back

57.- Pituitary. Epiphysis.

58.- Thyroid. Parathyroid. Adrenals. Gonads



## Temporary organization of learning:

Block of content	Number of sessions	Hours
INTRODUCTION	1,00	2,00
CYTOLOGY	1,00	2,00
EMBRYOLOGY	1,00	2,00
LOCOMOTOR	10,00	20,00
CIRCULATORY SYSTEM	3,00	6,00
SPLANCHNOLOGY	3,00	6,00
NERVOUS SYSTEM AND SENSES	9,00	18,00
ENDOCRINE	2,00	4,00

## References

### ·Main bibliography (recommended as regular reading-consultation)

- Suárez Quintanilla J. HUMAN ANATOMY FOR HEALTH SCIENCES STUDENTS. Elsevier. 2nd Edition 2020
- Gilroy. Prometheus. ANATOMY FOR STUDENTS. 2nd edition. 2020
- Waschke, Koch. ANATOMY TEXT. Elsevier. 1st Edition 2018
- Wineski Lawrence. CLINICAL ANATOMY BY REGION. Wolters Kluwer. 10th Edition. 2019
- Drake J. GRAY. BASIC ANATOMY. Elsevier. 2nd Edition 2018
- Hansen John. NETTER ANATOMY COLORING BOOK. Elsevier. 2nd Edition. 2019

### Further reading:

- Sobotta - R. Putz. SOBOTTA. ATLAS OF HUMAN ANATOMY 3 VOLS. Elsevier. 24th Edition 2018
- Netter F. ATLAS OF HUMAN ANATOMY. Elsevier. 7th Edition. 2019-
- Feneis H. ILLUSTRATED ANATOMICAL NOMENCLATURE Ed. Masson 6th Edition. 2021