



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: -

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



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

The evaluation is continuous and is based on the collection/delivery of evidence of attendance/participation, practical activities and individual and/or group work throughout the semester. All submissions of individual and group work will be made through the UCV VIRTUAL CAMPUS within the deadlines and in the forms specified by the professor of the subject. Late submissions will not be accepted under any circumstances. The assignments that have not yet been submitted will be submitted and evaluated on the official date of the second examination. In addition, a final theoretical-practical test will be held during the official examination period. The official examination dates are set by the Dean's Team of the Faculty according to the periods established in the academic calendar. For changes to examination dates, please refer to the reasons and procedure in Article 12 of the Examination Regulations.

<https://www.ucv.es/Portals/0/documentos/normativa/20170526144309926.pdf>

Criteria for Award of Distinction: Evidence of excellence in all competencies and learning outcomes.

Note: In order to pass the course, the student must pass the different assessment systems (attendance and active participation, practical/work and examination) separately. Failure to comply with the rules and deadlines set for the completion of academic activities will invalidate the grade.



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
TOTAL		60,00	2,40



LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
<p>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)</p> <p>M7</p>	R3	40,00	1,60
<p>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)</p> <p>M8</p>	R1, R2, R3	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
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
 - 27. Nostrils. Sinuses.
 - 28. Larynx. Phonation apparatus.
 - 29. Trachea and bronchial tree.
 - 30. Lungs. Pleura. Mediastinum.
- B.- DIGESTIVE
 - 31. Oral cavity. Language. Teeth. Salivary glands.
 - 32. Pharynx. Esophagus. Stomach.
 - 34. Small intestine. Large intestine
 - 35.-Pancreatic exocrine and endocrine. Spleen. Liver. Bile ducts.
 - 36.-Peritoneum. Intestinal vasculature.
- C.- UROGENITAL SYSTEM
 - 37.- Kidney and Urinary Tract
 - 38.- male genital.
 - 39.- female genital.



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. Extrapyramidal 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 pudental 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
- Feneis H. ILLUSTRATED ANATOMICAL NOMENCLATURE Ed. Masson 6th Edition. 2021

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