Information about the subject

Degree: Bachelor of Science Degree in Nursing

Faculty: Faculty of Medicine and Health Sciences

Code: 1211101 **Name:** Human and Functional Anatomy

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

Module: CORE COURSES 64.5 ECTS)

Subject Matter: ANATOMÍA HUMANA **Type:** Basic Formation

Field of knowledge: ENFERMERÍA

Department: Anatomy and Physiology

Type of learning: Classroom-based learning

Languages in which it is taught: Spanish

Lecturer/-s:

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Module organization

CORE COURSES 64.5 ECTS)

Subject Matter	ECTS	Subject	ECTS	Year/semester
ANATOMÍA HUMANA	6,00	Human and Functional Anatomy	6,00	1/1
FISIOLOGÍA	12,00	Human Physiology	6,00	1/2
		Physiopathology	6,00	2/1
BIOQUÍMICA	6,00	Clinical Biochemistry	6,00	1/1
ESTADÍSTICA	6,00	Biostatistics and Research Methodology	6,00	1/2
PSICOLOGÍA	6,00	Psychology of Care	6,00	1/1
IDIOMA MODERNO	6,00	English	6,00	1/2
FARMACOLOGÍA	6,00	Pharmacology	6,00	2/1
NUTRICIÓN	6,00	Nutrition and Dietetics	6,00	2/1
SOPORTE VITAL	6,00	Emergency Care and Life Support	6,00	4/1

Recommended knowledge

Previous knowledge of Biology at the secondary or high school level is recommended.
Especially in:
Cell and tissues: cell structure and functions.
Apparatus and systems of the human body.
Basic notions of chemistry.
Composition of the human body.
Scientific terminology
Latin and Greek prefixes and suffixes common in anatomy (e.g., “hyper-”, “-itis”, “cardio-”, etc.).
Ability to read and memorize technical terms, many in Latin.
Useful skills and attitudes.
Memorization and visualization: Anatomy involves a lot of structured memorization. It helps to have good ability to visualize the human body in 3D or use visual aids such as diagrams and anatomical models.
Logical understanding of structures and functions: although it is not physiology, understanding what each part of the body is for will help you retain anatomical information.
Organization and method of study: Anatomy usually has a high theoretical load. A good organization of time and techniques such as concept maps, flashcards, drawings or interactive apps are very useful.
Translated with DeepL.com (free version)

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	R10. Definir la estructura y función del cuerpo humano. Comprender las bases moleculares y fisiológicas de las células y los tejidos.
R2	R44. Utilizar e integrar el lenguaje anatómico como base de la comunicación interprofesional en ciencias de la salud.
R3	R45. Definir los principios básicos del desarrollo y entender el mismo como un proceso continuo desde la fecundación hasta el nacimiento.

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):

SPECIFIC		Weighting			
		1	2	3	4
CON1	To have acquired advanced knowledge and demonstrated an understanding of the theoretical and practical aspects and the methodology of work in their field of study with a depth that reaches the forefront of knowledge.				x
CON2	To know and identify the structure and function of the human body.				x

Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
R1, R2, R3	60,00%	Written exams
R1, R2, R3	30,00%	Practical tests and assignments
R1, R2, R3	10,00%	Attendance and participation

Observations

In order to pass the course it will be necessary to have obtained 50% of the score in the THEORETICAL PART OF THE EXAM and 50% in the PRACTICAL PART OF THE EXAM.

In case a student passes the theoretical part of the exam and not the practical part of the exam, the grade of the theoretical part will be kept for the second exam, in which only the practical part of the exam must be taken. The grade that will appear in the minutes will be that corresponding to the grade of the practical exam out of 10.
In case a student passes the practical part of the exam and not the theoretical part of the exam, the grade of the practical part will be kept for the second session, in which he/she will only have to take the theoretical part of the exam. The grade that will appear in the minutes will be that corresponding to the grade of the theoretical exam out of 10.
In the event that a student does not pass any of the two parts, neither the theoretical nor the practical exam, in the second or successive summons he/she will have to take both parts. The grade that will appear in the minutes will be that corresponding to the highest grade of the two exams out of 10.

Others:
The correctness of the use of language will be valued. Spelling mistakes, grammatical inconsistencies and “sms” language will be penalized with a decrease of 0.1 point per fault committed.

CRITERIA FOR EVALUATION:
The grade for the course will be determined as follows:

1. EXAM (80% of the value of the final grade)
The qualification of 80% of the subject will be made through ONE EXAM, which will be articulated as follows:

1.a Theoretical part of the exam (60% of the value of the final grade)
The theoretical evaluation will be carried out at the end of the course through a theoretical exam, which may consist of:
- Multiple-choice questions (40% of the grade): several answer options are provided with only one correct answer. Wrong answers are penalized according to the formula A-(E/n-1). Images may appear.
- Short answer questions (20% of the grade): the student's ability to summarize the information and reason the contents of the subject is assessed. Images may appear.

1.b Practical part of the exam (20% of the value of the final grade)
Practical workshops will be carried out throughout the course (they will be indicated by the professor). The practical evaluation will be carried out through a practical exam that will deal with the contents explained in these workshops. The practical exam will take place on the same day as the theoretical exam. At the end of the theoretical exam, a series of photographs of the anatomical models will be projected in which a series of structures will have to be identified.

2. ACTIVITIES (20% of the value of the final grade)
The grade of 20% of the course will be made through activities requested by the teacher in the classroom. These activities will only be taken into account in case the student passes separately the theoretical and the practical part of the exam. The student who does not deliver these activities will lose 20% of the value of the final grade (2 points out of 10), or the proportional part.
A partial written test may be taken.

CRITERIA FOR GRANTING HONORARY REGISTRATION:
In accordance with the regulations governing the evaluation and grading of the subject in force at UCV, the mention of “Matrícula de Honor” may be awarded to students who have obtained a grade equal to or higher than 9.0. The number of “Matrícula de Honor” may not exceed five percent of the students enrolled in the group in the corresponding academic year, unless the number of students enrolled is less than 20, in which case only one “Matrícula de Honor” may be awarded.
Exceptionally, honorary awards may be allocated among the different groups of the same subject on an overall basis. However, the total number of honors to be awarded will be the same as if they were assigned by group, but these may be distributed among all students according to a common criterion, regardless of the group to which they belong. The criteria for the awarding of “Honors” will be carried out according to the criteria stipulated by the professor responsible for the subject detailed in the “Observations” section of the evaluation system of the teaching guide.

DEVELOPMENT OF THE COURSE IN SECOND AND SUBSEQUENT REGISTRATIONS:

A regular group will be formed if there are 40 or more students enrolled in second or subsequent enrollments. In the event that the number of students is less, 6 teaching sessions will be planned. The professor in charge will contact the students through the virtual campus, in order to indicate the day and time of the corresponding tutorials.

In order to pass the course it will be necessary to have obtained 50% of the score in the THEORETICAL PART OF THE EXAM and 50% in the PRACTICAL PART OF THE EXAM.
In case a student passes the theoretical part of the exam and not the practical part of the exam, the grade of the theoretical part will be kept for the second exam, in which only the practical part of the exam must be taken. The grade that will appear in the minutes will be the grade of the practical exam out of 10.

In case a student passes the practical part of the exam and not the theoretical part of the exam, the grade of the practical part will be kept for the second exam, in which only the theoretical part of the exam must be taken. The grade that will appear in the minutes will be that corresponding to the grade of the theoretical exam out of 10.
In case a student does not pass any of the two parts, neither the theoretical nor the practical exam, in the second or successive summons he/she will have to take both parts. The grade that will appear in the minutes will be that corresponding to the highest grade of the two exams out of 10.
The grade of the course will be determined in the following way:

1. EXAM (80% of the value of the final grade)
The qualification of 80% of the subject will be made through ONE EXAM, which will be articulated as follows:
1.a Theoretical part of the exam (60% of the value of the final grade)
The theoretical evaluation will be carried out at the end of the course through a theoretical exam, which may consist of:
- Multiple-choice questions (40% of the grade): several answer options are provided with only one correct answer. Wrong answers are penalized according to the formula A-(E/n-1). Images may appear.
- Short answer questions (20% of the grade): the student's ability to summarize the information and reason the contents of the subject is assessed. Images may appear.
1.b Practical part of the exam (20% of the value of the final grade).
Practical workshops will be carried out throughout the course (they will be indicated by the professor). The practical evaluation will be carried out through a practical exam that will deal with the contents explained in these workshops. The practical exam will take place on the same day as the theoretical exam. At the end of the theoretical exam, a series of photographs of the anatomical models will be projected in which a series of structures will have to be identified.

2. ACTIVITIES (20% of the value of the final grade)
The grade of 20% of the course will be made through activities requested by the teacher in the

classroom. These activities will only be taken into account in case the student passes separately the theoretical and the practical part of the exam. The student who does not deliver these activities will lose 20% of the value of the final grade (2 points out of 10), or the proportional part.
A partial written test may be taken.

SINGLE EVALUATION
"In this subject the possibility of a single evaluation is not contemplated, as it requires the mandatory completion of practical activities with active participation of the students".

USE OF THE AI
Students may use the AI for personal study of the course. -Students will not be able to use the AI for the realization of evaluable tasks, unless it is required in some specific activity and the teacher indicates it. In case of using AI in any of the activities, it must be mentioned in which part of the activity it has been used, which AI tool has been used and for what purpose.
CRITERIA FOR THE AWARD OF HONORARY GRADUATION:
In accordance with the regulations governing the evaluation and grading of the subject in force at UCV, the mention of “Matrícula de Honor” may be awarded to students who have obtained a grade equal to or higher than 9.0. The number of “Matrícula de Honor” may not exceed five percent of the students enrolled in the group in the corresponding academic year, unless the number of students enrolled is less than 20, in which case only one “Matrícula de Honor” may be awarded. Exceptionally, honorary awards may be assigned among the different groups of the same subject on an overall basis. However, the total number of honors to be awarded will be the same as if they were assigned by group, but these may be distributed among all students according to a common criterion, regardless of the group to which they belong.

The criteria for the awarding of “Honors” will be carried out according to the criteria stipulated by the professor responsible for the subject detailed in the “Observations” section of the evaluation system of the teaching guide. 9

MENTION OF DISTINCTION:
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 Presentation, explanation, and demonstration of content by the lecturer, and active listening, elaboration, and formulation of questions that organise the information received

M2 Activities carried out in specialised areas and with specialised equipment

M3 Personalised attention and small-group work. Period of instruction and/or guidance provided by a tutor in order to review and discuss the materials and topics presented in classes, seminars, readings, assignments, etc

M4 Set of oral and/or written tests used in the initial, formative, or summative assessment of the student

M5 Student study: Individual preparation of reading materials, essays, problem-solving activities, seminars, assignments, reports, etc., to be presented or submitted in lectures, practical classes, and/or small-groups. Work carried out on the university platform (https://campusvirtual.ucv.es/)

M6 Group preparation of reading materials, essays, problem-solving activities, assignments, reports, etc., to be presented or submitted in lectures, practical classes, seminars, and/or small-groups. Work carried out on the university platform (https://campusvirtual.ucv.es/)

IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
Participatory lecture Presentation, explanation, and demonstration of content by the lecturer, along with active listening, and the development and formulation of questions that organise the information received. M1, M2	R1, R2, R3	33,00	1,32
Laboratory Activities carried out in specialised areas and with specialised equipment M1, M2, M3	R1, R2	23,00	0,92
Support sessions Personalised and small-group mentoring. Period of instruction and/or guidance provided by a tutor with the aim of reviewing and discussing the materials and topics presented in classes, seminars, readings, assignments, etc M3	R1, R2, R3	2,00	0,08
Assessment Set of oral and/or written tests used in the initial, formative, or summative evaluation of the student M1, M2, M3, M4, M5, M6	R1, R2, R3	2,00	0,08
TOTAL		**60,00**	**2,40**

LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
Independent work Individual preparation of reading materials, essays, problem-solving activities, seminars, assignments, reports, etc., to be presented or submitted in lectures, practical classes, and/or small-group sessions. Work carried out on the university platform (www.plataforma.ucv.es). M5, M6	R1, R2, R3	80,00	3,20
Group work Group preparation of reading materials, essays, problem-solving activities, assignments, reports, etc., to be presented or submitted in lectures, practical classes, seminars, and/or small-group tutorials. Work carried out on the university platform (www.plataforma.ucv.es) M2, M5, M6	R1, R2	10,00	0,40
TOTAL		**90,00**	**3,60**

Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
General concepts	Topic 0. Human embryology. Topic 1. Human Histology. General concepts of Anatomy. Organization and levels of the human body. Organs and systems. Anatomical positions and planes. Anatomical-medical terminology.
Locomotor system	Topic 3. Locomotor system. Skeleton and joints. Head: skeleton and musculature. Topic 4. Spinal column. Thoracic cage. Musculature of the back, thorax and abdominal wall. Topic 5. Upper limb: main bones and muscles. Vascularization and innervation. Topic 6. Lower limb: main bones and muscles. Vascularization and innervation.
Anatomy of the thorax	Topic 7. Anatomy of the heart. Layers, cavities, vascularization and cardiac innervation. Large arterial vessels: structure, classification, location and general distribution. Large venous and lymphatic vessels: structure, classification, location and general distribution. Anatomy of the respiratory system: upper and lower airways. Lungs
Anatomy of the abdomen	Topic 11. Digestive system. Mouth, esophagus, stomach, small and large intestine. Adjunct organs: liver, pancreas and spleen. Vascularization and innervation.
Anatomy of the pelvis	Topic 12. Renal and excretory system. Urinary tract and kidneys. Female genital system: ovaries, tubes, uterus, vagina and external genitalia. Male genital system: testicles, coverings, seminal ducts and external genitalia.

Anatomy of the nervous and endocrine system	Topic 14. Nervous system. Concept and classification of the nervous system. Study of the spinal cord, brainstem, cerebrum and cerebellum. Main ascending and descending conduction pathways. Neuroendocrine system: pituitary, thyroid and adrenal glands.
Anatomy of the sense organs	Topic 16. Sense organs: hearing, sight, smell and taste.
Practical	Practice 1 Dissection room Osteology and musculature. Practice 2 Dissection room Splacnology. Practice 3 Anatomical models Osteology and musculature. Practice 4 Anatomical models Splacnology.

Temporary organization of learning:

Block of content	Number of sessions	Hours
General concepts	2,00	4,00
Locomotor system	3,50	7,00
Anatomy of the thorax	3,00	6,00
Anatomy of the abdomen	3,00	6,00
Anatomy of the pelvis	2,00	4,00
Anatomy of the nervous and endocrine system	3,00	6,00
Anatomy of the sense organs	2,00	4,00
Practical	11,50	23,00

References

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Sobotta (2018). Atlas of Human Anatomy. (24th ed.). Elsevier.
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Salder, TW. (2000). Medical Embryology. (14th ed.) Langman, Williams & Wilkins.
Tortora, G. and Derrickson, B. (2018) Principles of Anatomy and Physiology. (15th ed.). Editorial Médica Panamericana. 14