Information about the subject

Degree: Bachelor of Science Degree in Physiotherapy

Faculty: Faculty of Medicine and Health Sciences

Code: 241107 **Name:** Anatomy I

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

Module: MODULE 1: BASIC FORMATION

Subject Matter: Anatomy **Type:** Basic Formation

Field of knowledge: Health Science

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

MODULE 1: BASIC FORMATION

Subject Matter	ECTS	Subject	ECTS	Year/semester
Anatomy	18,00	Anatomy I	6,00	1/1
		Anatomy II	6,00	1/2
		Cellular and Molecular Biology	6,00	1/1
Physiology	18,00	Biomechanics and Applied Physics	6,00	2/1
		Physiology I	6,00	1/2
		Physiology II	6,00	2/1
Applied psychosocial sciences	12,00	Anthropology	6,00	1/2
		Psychology	6,00	1/2
Statistics	6,00	Biostatistics	6,00	1/1
Modern Language	6,00	English	6,00	1/1

Recommended knowledge

Not required. Knowledge in biology or natural sciences equivalent to the high school level is recommended.

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 the topographical situation, the model and the relationships of the different structures of the nervous system and the internal organs.

R2 Identifies on the body the different structures of the human body.

R3 Applies anatomical knowledge to explain the relationship between morphology and the function of the different organic systems.
Knows the international anatomical terminology and knows how to use it as a means of communication between health professionals.

R4 The student knows the international anatomical terminology and knows how to use it as a means of communication between health professionals.

R5 Locates and prioritizes anatomical knowledge in terms of its importance, discriminating between relevant and accessory knowledge.

R6 Looks for bibliographical information from different sources and knows how to use it with a critical and constructive spirit.

R7 The student is capable of preparing documents on anatomy and working in a team.

R8 Analyses his work critically.

R9 The student is able to write a comprehensible and organized text on various aspects of human anatomy.

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):

BASIC		Weighting			
		1	2	3	4
CB1	Students demonstrate knowledge and understanding in an area of study that is at the core of general secondary education, and is often at a level that, while supported by advanced textbooks, also includes some aspects that involve knowledge from the cutting edge of their field of study.				x
CB2	Students know how to apply their knowledge to their work or vocation in a professional way and possess the skills usually demonstrated by developing and defending arguments and solving problems within their area of study.	x			
CB3	Students have the ability to gather and interpret relevant data (usually within their area of study) to make judgments that include reflection on relevant social, scientific or ethical issues.			x	
CB4	Students can convey information, ideas, problems and solutions to both specialized and non-specialized audiences.		x		
CB5	Students develop those learning skills necessary to undertake further studies with a high degree of autonomy.			x	

SPECIFIC		Weighting			
		1	2	3	4
CE1	Students learn human anatomy and physiology, highlighting the dynamic relations between structure and function, especially of the locomotive system and the nervous and cardio-respiratory systems.				x
CE3	Students identify the factors that influence human growth and development throughout life.				x
CE7	Students know the application of ergonomic and anthropometric principles.	x			

CE11	Students identify the factors involved in teamwork and leadership situations.			x	
CE47	Students maintain an attitude of learning and improvement. This includes expressing interest and acting in a constant search for information and professional improvement, committing to contribute to professional development in order to improve practice competence and maintain the status that corresponds to a qualified and regulated profession.			x	
CE51	Show respect, appreciation and sensitivity to the work of others.			x	
CE52	Develop the ability to organize and lead work teams effectively and efficiently.			x	

TRANSVERSAL		Weighting			
		1	2	3	4
CT1	Decision-making		x		
CT2	Problem solving.			x	
CT3	Capacity for organization and planning.		x		
CT4	Analysis and synthesis capacity.			x	
CT5	Oral and written communication in the native language.		x		
CT6	Information management capacity.		x		
CT7	Computer skills related to the field of study.		x		
CT8	Knowledge of a foreign language.		x		
CT9	Ethical commitment.		x		
CT10	Teamwork.			x	
CT11	Interpersonal relationship skills.		x		
CT12	Work in an interdisciplinary team		x		

CT13	Critical Reasoning			x	
CT17	Adaptation to new situations.		x		
CT18	Creativity			x	
CT19	Autonomous learning				x
CT20	Initiative and entrepreneurship		x		
CT21	Leadership.			x	
CT22	Knowledge of other cultures and customs	x			
CT23	Sensitivity to environmental issues.	x			

Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
R1, R3, R4, R5, R6, R8, R9	15,00%	OPEN QUESTIONS: Written exam in which theoretical knowledge and the student's ability to relate, integrate and express it coherently in written language are evaluated. It allows the following generic or transversal skills to be assessed: 4 Capacity for analysis and synthesis. 3 Capacity for organisation and planning. 5 Oral and written communication in the native language. 8 Knowledge of a foreign language. 2 Problem-solving 19 Autonomous learning.
R1, R3, R4, R5, R7, R8	40,00%	TEST TYPE: Multiple choice test with one correct answer out of five possible ones. It allows the student to know in greater detail the contents acquired by him/her. It allows the following generic or transversal competences to be assessed: 2 Problem solving 1 Decision making 13 Critical thinking
	0,00%	PRACTICES: Oral test in which the student is asked to solve practical exercises, clinical cases or problems about the knowledge of the different subjects. It assesses the following generic or transversal competences: 4 Analysis and synthesis capacity. 3 Capacity for organisation and planning. 7 IT Knowledge. 6 Information management skills. 2 Problem-solving 1 Decision-making. 13 Critical thinking. 19 Self-directed learning.

R3, R4, R6, R7, R9	10,00%	WORKS: The student, individually or in a group, elaborates a revision or research topic and presents it, in writing, for the evaluation by the teacher. The following generic or transversal competences are valued: 4 Capacity for analysis and synthesis. 3 Capacity for organisation and planning. 7 Computer skills. 6 Information management skills. 10 Teamwork. 14 Working in an international context. 11 Interpersonal skills. 13 Critical thinking. 19 Autonomous learning. 18 Creativity. 21 Leadership. 20 Initiative and entrepreneurship. 16 Motivation for Quality. 70 Maintaining an attitude of learning and improvement. 72 Knowing one's own skills and limitations.
R1, R2, R4	30,00%	PRACTICAL EXAM: The student is faced with a test in which s/he must demonstrate through practical application the acquisition of certain knowledge. For example, histological or anatomopathological diagnosis, image interpretation or diagnostic tests. This test evaluates the following generic or transversal skills: 13 Critical reasoning. 19 Autonomous learning.
R3, R5	5,00%	ATTENDANCE AND PARTICIPATION IN CLASS: The teacher evaluates the participation, involvement and progression of the student's acquisition of knowledge and skills during the theoretical and practical classes. It will not exceed 5% of the final grade.

Observations

It is necessary to achieve the appropriate learning outcomes collected in each assessment system.Maintaining the respective percentages, the evaluation systems set out above can be developed in continuous evaluation mode throughout the semester, informing students in advance and collecting this information on the UCVnet platform of the subject. Failure to comply with the rules and deadlines established for the conduct of academic activities will invalidate the grade. In accordance with the general regulations, only one "*Matricula de honor*" grade can be granted for every 20 students (not for a fraction of 20, with the exception of the case of groups of less than 20 students in total, in which 1 "*MdH*" can be given.) A grade of 9 or above is required for this.

Single assessment evaluation:
This course does not offer single assessment evaluation, as it requires mandatory practical activities with active student participation.

Use of Artificial Intelligence (AI):
Students may use AI for personal study of the course. Students may not use AI to complete assessable assignments unless required for a specific activity and instructed by the instructor. If AI is used in any of the activities, the specific part of the activity, the AI tool used, and the purpose for which it was used must be stated.

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	Master class Problem solving Exposition of contents by the teacher. Explanation of knowledge and skills
M2	Case resolution: Analysis of sample realities - real or simulated - that allow the student to connect theory with practice, to learn from models of reality or to reflect on the processes used in the cases presented.
M5	Set of tests carried out to know the degree of acquisition of knowledge and skills of the student.
M6	Problem solving and case studies Written work Online activity in the e-learning platform Personal study. Search of information and documentation.
M12	Group work: Group work sessions supervised by the teacher. Knowledge construction through student interaction and activity.
M14	Group work to search, discuss and filter information about the subjects

M15 Seminar, supervised monographic sessions with shared participation

M16 Student's study: Individual preparation of readings, essays, problem solving, seminars.

IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
Theoretical lessons M1	R1, R3, R4, R5	40,00	1,60
Practice lessons M2	R1, R2	10,00	0,40
Seminar M15	R3, R5, R8	2,00	0,08
Office Hours M1	R6	3,00	0,12
Assessment M5	R1, R2, R3, R4, R5, R8, R9	5,00	0,20
TOTAL		**60,00**	**2,40**

LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
Autonomous work M16	R6, R9	80,00	3,20
Group work M14	R7	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
UNIT I.-INTRODUCTION TO THE STUDY OF ANATOMY	·General in anatomy ·History of Anatomy. ·Positions axes and planes
UNIT II.- EMBRYOLOGY	•General concepts of human embryology •Fertilization and Implantation •Gastrulation and formation of embryonic leaves •Normal gestation
UNIT III. CIRCULATORY SYSTEM	•Organization and components •Heart •Angiology •Circulation
UNIT IV.- RESPIRATORY SYSTEM	•Organization and components •Airways (respiratory tract) •Lungs and Pleura Breathing and respiratory musculature
UNIT V.- DIGESTIVE / ENDOCRINE	•Digestive system: Organization and Components •Digestive tract: Sections •Glands: Liver and Pancreas •Endocrine System: Organization and Components
UNIT VI.- UROGENITAL SYSTEM	•Urinary System: Organization and Components •Kidney •Urinary Tract •Female genitalia •Male genitalia

UNIT VII.- NEUROANATOMY	•Nervous system: Organization •Central Nervous System •Peripheral nervous system •Sense organs
UNIT VIII.- PRACTICES	•Embryology Practices •Splacnology Practices •Neuroanatomy Practices

Temporary organization of learning:

Block of content	Number of sessions	Hours
UNIT I.-INTRODUCTION TO THE STUDY OF ANATOMY	1,00	2,00
UNIT II.- EMBRYOLOGY	3,00	6,00
UNIT III. CIRCULATORY SYSTEM	4,00	8,00
UNIT IV.- RESPIRATORY SYSTEM	4,00	8,00
UNIT V.- DIGESTIVE / ENDOCRINE	4,00	8,00
UNIT VI.- UROGENITAL SYSTEM	4,00	8,00
UNIT VII.- NEUROANATOMY	5,00	10,00
UNIT VIII.- PRACTICES	5,00	10,00

References

Basic:
Gray. Anatomía para estudiantes. 2024
Gray. Anatomía básica. 3 edition - 2023
Estructura y función del cuerpo humano (16ª Ed.). Patton Ed. ELSEVIER (2021)
Atlas de anatomía humana, Edición 7 By F.H. Netter Ed. ELSEVIER (2019)
Sobotta. Atlas de anatomía humana vol 1 y 2 Edición 24 By Friedrich Paulsen and Jens Waschke; Edited by Friedrich Paulsen and Jens Waschkey Ed. ELSEVIER (2018)
Sobotta. Cuaderno de anatomía para colorear. 5 edition. Oliver Kretz (2022)
Gray. Flashcards de Anatomía. 4 edition. Richard L. Drake & A. Wayne Vogl & Adam M.W. Mitchell (2022)

Complementary:
Feneis. Nomenclatura anatómica ilustrada. ED. 11. Wolfgang Dauber. (2021)
Netter. Flashcards de anatomía, Edición 5 Edited by John T. Hansen, PhD Ed. ELSEVIER (2020)
Sobotta. Cuaderno de anatomía para colorear. 5 edition. Oliver Kretz (2022)
Gray. Flashcards de Anatomía. 4 edition. Richard L. Drake & A. Wayne Vogl & Adam M.W. Mitchell (2022)
Netter. Atlas de anatomía humana. Abordaje por sistemas (2023)

Gray´s anatomy http://www.bartleby.com/107/ on line free.

Specific:
Langman. Embriología médica. Sadler. 14 edición. Editorial WOLTERS KLUWER?. ISBN:9788417602116. (2019)