



Information about the course

Degree: Bachelor of Science Degree in Podiatry

Faculty: Faculty of Medicine and Health Sciences

Code: 471102 **Name:** Anatomy of the Lower Extremity

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

Module: BASIC TRAINING.

Subject Matter: ANATOMIA **Type:** Formación Básica

Branch of knowledge: Fisioterapia, podología, nutrición y dietética, terapia ocupacional, óptica y optometría y logopedia.

Department: Anatomy and Physiology

Type of learning: Classroom-based learning

Language/-s in which it is given: Spanish

Teachers:

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Module organization

BASIC TRAINING.

Subject Matter	ECTS	Subject	ECTS	Year/semester
ANATOMIA	12	Anatomy	6	1/1
		Anatomy of the Lower Extremity	6	1/2
BIOLOGÍA	12	Cellular and Tissular Biology	6	1/1
		Microbiology	6	1/2
FARMACOLOGÍA	6	Pharmacology	6	2/1
IDIOMA MODERNO	6	English	6	2/2
ESTADÍSTICA	6	Biostatistics	6	1/1
PSICOLOGÍA	6	Psychology	6	1/2
FISIOLOGÍA	6	Physiology	6	1/1
BIOQUÍMICA	6	Biophysics and Biochemistry	6	1/1



Learning outcomes

Al finalizar la asignatura, el estudiante deberá demostrar haber adquirido los siguientes resultados de aprendizaje:

R10 - Utiliza el instrumental de disección en el trabajo práctico según se le ha enseñ~ado

Learning outcomes of the specified title

Type of AR: Description

- Understand embryological development in different stages of formation. Human anatomy and physiology. Study of different organs, systems, and structures. Vascular and nervous splanchnology. Body axes and planes. Specific anatomy of the lower limb.
- Understand the anatomical and functional concept of disease and the classification of diseases. Describe the pathology of different organs, systems, and structures. Medical semiology. Dermatology. Rheumatology. Traumatology. Neurology. Endocrinology. Vascular pathological processes. Systemic pathologies affecting the foot.

R11 - Aplica los conocimientos generales de anatomía a la disección

Learning outcomes of the specified title

Type of AR: Description

- Understand embryological development in different stages of formation. Human anatomy and physiology. Study of different organs, systems, and structures. Vascular and nervous splanchnology. Body axes and planes. Specific anatomy of the lower limb.
- Understand the anatomical and functional concept of disease and the classification of diseases. Describe the pathology of different organs, systems, and structures. Medical semiology. Dermatology. Rheumatology. Traumatology. Neurology. Endocrinology. Vascular pathological processes. Systemic pathologies affecting the foot.



R4 - Reconoce las estructuras anatómicas en el trabajo práctico sobre cadáver

Learning outcomes of the specified title

Type of AR: Description

- Understand embryological development in different stages of formation. Human anatomy and physiology. Study of different organs, systems, and structures. Vascular and nervous splanchnology. Body axes and planes. Specific anatomy of the lower limb.
 - Understand the anatomical and functional concept of disease and the classification of diseases. Describe the pathology of different organs, systems, and structures. Medical semiology. Dermatology. Rheumatology. Traumatology. Neurology. Endocrinology. Vascular pathological processes. Systemic pathologies affecting the foot.
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R5 - Aplica los conocimientos generales de anatomía

Learning outcomes of the specified title

Type of AR: Description

- Understand embryological development in different stages of formation. Human anatomy and physiology. Study of different organs, systems, and structures. Vascular and nervous splanchnology. Body axes and planes. Specific anatomy of the lower limb.
 - Understand the anatomical and functional concept of disease and the classification of diseases. Describe the pathology of different organs, systems, and structures. Medical semiology. Dermatology. Rheumatology. Traumatology. Neurology. Endocrinology. Vascular pathological processes. Systemic pathologies affecting the foot.
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R6 - Busca información bibliográfica de diferentes fuentes y sabe utilizarla de forma crítica y constructiva

Learning outcomes of the specified title

Type of AR: Description



- Understand embryological development in different stages of formation. Human anatomy and physiology. Study of different organs, systems, and structures. Vascular and nervous splanchnology. Body axes and planes. Specific anatomy of the lower limb.
- Understand the anatomical and functional concept of disease and the classification of diseases. Describe the pathology of different organs, systems, and structures. Medical semiology. Dermatology. Rheumatology. Traumatology. Neurology. Endocrinology. Vascular pathological processes. Systemic pathologies affecting the foot.

R7 - Conoce y discrimina los pasos planos y ejes corporales y los relativos al miembro inferior

Learning outcomes of the specified title

Type of AR: Description

- Understand embryological development in different stages of formation. Human anatomy and physiology. Study of different organs, systems, and structures. Vascular and nervous splanchnology. Body axes and planes. Specific anatomy of the lower limb.
- Understand the anatomical and functional concept of disease and the classification of diseases. Describe the pathology of different organs, systems, and structures. Medical semiology. Dermatology. Rheumatology. Traumatology. Neurology. Endocrinology. Vascular pathological processes. Systemic pathologies affecting the foot.

R8 - Conoce los principales conceptos que integran la terminología anatómica, sus fundamentos y utilidad clínica y quirúrgica

Learning outcomes of the specified title

Type of AR: Description

- Understand embryological development in different stages of formation. Human anatomy and physiology. Study of different organs, systems, and structures. Vascular and nervous splanchnology. Body axes and planes. Specific anatomy of the lower limb.
- Understand the anatomical and functional concept of disease and the classification of diseases. Describe the pathology of different organs, systems, and structures. Medical semiology. Dermatology. Rheumatology. Traumatology. Neurology. Endocrinology. Vascular pathological processes. Systemic pathologies affecting the foot.



R9 - Distingue las diferentes estructuras anatómicas osteomusculares , vasculares y de inervación del miembro inferior

Learning outcomes of the specified title

Type of AR: Description

- Understand embryological development in different stages of formation. Human anatomy and physiology. Study of different organs, systems, and structures. Vascular and nervous splanchnology. Body axes and planes. Specific anatomy of the lower limb.
 - Understand the anatomical and functional concept of disease and the classification of diseases. Describe the pathology of different organs, systems, and structures. Medical semiology. Dermatology. Rheumatology. Traumatology. Neurology. Endocrinology. Vascular pathological processes. Systemic pathologies affecting the foot.
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Assessment system

Modalidad presencial

Assessed learning outcomes	Granted percentage	Assessment tool
R4, R5, R7, R8, R9, R10, R11	50,00%	TEST TYPE TESTS: Multiple-choice exam with one correct answer.
R6	5,00%	EXPOSITION: The student develops through an oral presentation, supported or not with audiovisual media, a topic or work commissioned by the teacher. At the end of the presentation, the teacher or the audience may ask questions.
R4, R5, R6, R7, R8, R9, R10, R11	5,00%	CLASS PARTICIPATION: The teacher evaluates the participation, involvement and progression of the acquisition of knowledge and skills of the student during the theoretical and practical classes.
R9	30,00%	PRACTICAL EXAM: The student faces a test in which he/she must demonstrate through practical application the acquisition of certain knowledge. For example, histological or anatomopathological diagnoses, interpretation of images or diagnostic tests.
R4, R5, R6, R7, R8, R9	10,00%	DELIVERABLE ACTIVITIES: Work/activity elaborated by the student

Observations

MINIMUM REQUIREMENTS:

First there will be the theoretical written test in which, out of a maximum score of 10 the student must obtain at least a score of 5 to be able to access the practical test. In this second test, the student must achieve a minimum of 5 out of a maximum score of 10 to consider that he/she has acquired the desired competences. Finally, the percentage of practice and participation will be



applied as long as the student has passed the two previous tests.

Both the evaluation instruments and the percentage given to them will have an independent character, the student must pass each one of them to consider that he/she has acquired the expected competences.

The percentage awarded to practices (exercises, slides, cases, dissection room, problems) will be considered that obtained in the completion of questionnaires, kahoot, slides made in class and at home and group work, through which the progression and acquisition of knowledge taught in classroom lectures will be evaluated. These are tests that are neither compulsory nor eliminatory of subject matter but, if the student decides not to take these tests, he/she loses the corresponding percentage of grade.

ADDITIONAL INFORMATION:

TEACHING OF THE SUBJECT IN SECOND AND SUCCESSIVE ENROLLMENTS:

There will be a specific group for students who are not of first enrollment if it exceeds the limit of occupancy of the classroom and a teacher in charge of this group.

The teacher in charge of this group will carry out 6 monitoring and tutoring sessions of 2 hours each. In each session the subject will be developed in a way that will reinforce the work of the skills that each student needs in order to pass the subject.

The evaluation of contents and skills will be carried out in the exam set in the official calendar for this subject.

The grading criteria applied in this case will be specified in 70% of the grade corresponding to the theoretical content exam and 30% to the practical content exam. The course will be considered passed when the grade of 5 is exceeded in both parts.

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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.



Actividades formativas

The methodologies to be used so that the students reach the expected learning outcomes will be the following:

- M1 Master Class: Problem solving. Presentation of content by the professor. Explanation of knowledge and skills.
- M6 Case Method: Presentation of the case by the professor based on objectives, the students' level, and available time. The case is then analyzed in a plenary session, and the group draws meaningful conclusions from the case analysis and resolution.
- M8 Practical Classes: In the basic science laboratory rooms, simulation laboratory practices, workshop rooms, virtual hospital, and the dissection room.
- M9 Tutorías (T). Conjunto de actividades llevadas a cabo por el profesor de atención personalizada al estudiante o en pequeños grupos con el objetivo de revisar y discutir los materiales y temas presentados en la clase, seminarios, lecturas, realización de trabajo, etc. Se persigue asegurar que la educación sea, verdaderamente, una formación integral del alumno y no quede reducida a un trasvase de información. Se trata, por tanto, de una relación personalizada de ayuda en la que el profesor-tutor atiende, facilita y orienta a uno o varios estudiantes en el proceso formativo.
- M10 Evaluación (Ev). Es el conjunto de procesos que tratan de evaluar los resultados de aprendizaje obtenidos por los estudiantes y expresados en términos de conocimientos adquiridos, capacidades, destrezas o habilidades desarrolladas y actitudes manifestadas. Abarca un amplio conjunto de actividades que pueden desarrollarse para que los estudiantes demuestren su formación (ej.: pruebas escritas, orales y prácticas, proyectos o trabajos,). Incluye Convocatorias oficiales.

IN-CLASS TRAINING ACTIVITIES

ACTIVITY	RELATIONSHIP WITH THE COURSE LEARNING OUTCOMES	METHODOLOGY	HOURS	ECTS
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MASTER CLASS	R5, R7, R8, R9	Master Class: Problem solving. Presentation of content by the professor. Explanation of knowledge and skills.	51,00	2,04
PRACTICAL CLASSES	R8, R9, R10, R11	Practical Classes: In the basic science laboratory rooms, simulation laboratory practices, workshop rooms, virtual hospital, and the dissection room.	6,00	0,24



TUTORIAL

R4, R5, R6, R7,
R8, R9, R10, R11

Tutorías (T).
Conjunto de
actividades llevadas
a cabo por el
profesor de
atención
personalizada al
estudiante o en
pequeños grupos
con el objetivo de
revisar y discutir los
materiales y temas
presentados en la
clase, seminarios,
lecturas, realización
de trabajo, etc. Se
persigue asegurar
que la educación
sea,
verdaderamente,
una formación
integral del alumno y
no quede reducida
a un trasvase de
información. Se
trata, por tanto, de
una relación
personalizada de
ayuda en la que el
profeso-tutor
atiende, facilita y
orienta a uno o
varios estudiantes
en el proceso
formativo.

1,00 0,04



EVALUATION	R4, R5, R6, R7, R8, R9, R10, R11	Evaluación (Ev). Es el conjunto de procesos que tratan de evaluar los resultados de aprendizaje obtenidos por los estudiantes y expresados en términos de conocimientos adquiridos, capacidades, destrezas o habilidades desarrolladas y actitudes manifestadas. Abarca un amplio conjunto de actividades que pueden desarrollarse para que los estudiantes demuestren su formación (ej.: pruebas escritas, orales y prácticas, proyectos o trabajos.). Incluye Convocatorias oficiales.	2,00	0,08
TOTAL			60,00	2,40



TRAINING ACTIVITIES OF AUTONOMOUS WORK

ACTVITY	RELATIONSHIP WITH THE COURSE LEARNING OUTCOMES	METHODOLOGY	HOURS	ECTS
TRABAJO AUTONOMO	R5, R6, R7, R8, R9	Case Method: Presentation of the case by the professor based on objectives, the students' level, and available time. The case is then analyzed in a plenary session, and the group draws meaningful conclusions from the case analysis and resolution.	90,00	3,60
TOTAL			90,00	3,60



Description of contents

Descripción de contenidos necesarios para la adquisición de los resultados de aprendizaje.

Theoretical content:

Block of content	Contents
INTRODUCTION TO THE STUDY OF ANATOMY	History of Anatomy.Generalities in anatomy (positions, axes and planes).
ARTROLOGY.	General arthrology.Joint types.
OSTEOLOGY	Osteology of the hip.Thigh osteology.Leg osteology.Ankle and foot osteology.
MIOLOGY	Myology of the hip.Myology of the thigh.Myology of the leg.Myology of the ankle and foot.
VASCULARIZATION.	Vascularization of the hip.Vascularization of the thigh.Vascularization of the leg.Vascularization of the ankle and foot.
INERVATION	Innervation of the hip.Innervation of the thigh.Innervation of the leg.Innervation of the ankle and foot.
PRACTICES	Practices of myology, vascularization and innervation of the lower limb in the laboratory on phamatomas. Osteology practices in the dissection room. Practices of myology, vascularization and innervation of the lower limb on corpses in the dissection room.



Temporary organization of learning:

Block of content	Sessions	Hours
INTRODUCTION TO THE STUDY OF ANATOMY	1	2,00
ARTROLOGY.	4	8,00
OSTEOLOGY	4	8,00
MIROLOGY	7	14,00
VASCULARIZATION.	4	8,00
INERVATION	4	8,00
PRACTICES	6	12,00



References

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- Anatomía del pie y el tobillo de Sarrafian: tercera edición descriptiva, topográfica y funcional por Armen S Kelikian MD (Editor), Shahan K. Sarrafian MD FACS (Editor)
- Williams y Warwick "Gray Anatomía". 38^a Edición. ed Harcourt. Madrid 2000
- STANDRING. GRAY'S ANATOMY (Inglés). Ed. Elsevier. Ed. 40°. 2009.
- Gray's anatomy <http://www.bartleby.com/107/> on line free.
- Principios Básicos en Anatomía de la Pierna y Pie. J Ferrer Torregrosa. Bienetec. ISBN: 978-8494097508