



Information about the subject

Degree: Bachelor of Science Degree in Criminology

Faculty: Faculty of Legal, Economic and Social Sciences

Code: 1301101 **Name:** Human Anatomy and Physiology

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

Module: Methodology. Scientific-technical.

Subject Matter: Forensic Science **Type:** Basic Formation

Field of knowledge: Other branches

Department: -

Type of learning: Classroom-based learning

Languages in which it is taught: Spanish

Lecturer/-s:

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Module organization

Methodology. Scientific-technical.

Subject Matter	ECTS	Subject	ECTS	Year/semester
Social	6,00	Research Methodology and Techniques in Social Sciences	6,00	1/2
Criminalistics	18,00	Applied Criminalistics	6,00	3/2
		Criminalistics Laboratory. Scientific Police	6,00	2/2
		Documentoscopy and Graphology	6,00	4/1
Forensic Science	24,00	Forensic Psychiatry	6,00	3/1
		Human Anatomy and Physiology	6,00	1/2
		Legal Medicine	6,00	2/1
		Techniques of Forensic Analyses	6,00	2/2

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 Providing the student with the fundamental concepts of Anatomy necessary for the study of Physiology and Pathology.
- R2 Being familiar with the language you will have to deal with in human pathology.
- R3 The anatomical knowledge according to the classical division of: tissue organization, study of the various apparatuses, organs and systems.
- R4 Studying the function of each of the components of the human body.
- R5 Conducting an initial sweep of the entire organization of the body and its general functions, insisting on the fundamental integration of all systems for the proper functioning of the human body.
- R6 To highlight the most important applications for the practice of Criminology.



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	Showing a command and understanding of knowledge in an area of study that is based on the general secondary education and that is usually at a level that implies the support on advanced textbooks but also the inclusion of knowledge from the cutting edge of their field of study.			X	
CB2	Being able to apply their knowledge to their jobs or vocational activities professionally and holding the competences that are demonstrated through the elaboration and defence of arguments as well as the solution of problems within their area of study.		X		
CB3	The ability to gather and interpret relevant data (normally within their area of study) so as to make judgements that include a reflection on relevant social, scientific or ethical issues.		X		
CB4	Being able to convey information, ideas, problems and solutions to a specialised or non-specialised public.		X		
CB5	Having developed the learning abilities necessary to pursue postgraduate studies with a high degree of autonomy.		X		
GENERAL		Weighting			
		1	2	3	4
CG5	The capacity to obtain and manage efficiently the information from the scientific literature, specialised journals, databases and other sources.		X		
CG6	The capacity to establish explanatory hypotheses, using predictive and operative relationships that offer responses to the criminal phenomenon in a criminological context.	X			
CG7	The capacity to take decisions and to design programs and strategies for both prevention and treatment of the criminal phenomenon.	X			



CG16 Oral and written communication skills in the native language with regards to Criminological Science in order to present, circulate and validate the outcomes of criminological and criminalistic research both through scientific development and through the proposal of specific policies and lines of action.

X

SPECIFIC

Weighting

1 2 3 4

CE23 Knowledge and application of scientific research techniques in the medical-legal and criminalistic field, as well as the basis and preparation of various expert reports.

X

CE24 Training in the elaboration of criminologist expert reports as well as in expert intervention in the different phases of the procedures.

X



Assessment system for the acquisition of competencies and grading system

In-class teaching

Assessed learning outcomes	Granted percentage	Assessment method
R1, R2, R4	55,00%	Analysis and resolution of case studies.
R2, R5	15,00%	Attendance and participation in class.
R3, R5, R6	30,00%	Exam or objective test to measure obtained competences.

Observations

85% of the grade is collected in a final exam (55% resolution of anatomical practical cases in theoretical questions and 30% in the identification of anatomical structures in the same objective test). It is necessary to pass this exam (obtain 50% of its value) to compute the "attendance and participation".

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.

Online teaching

Assessed learning outcomes	Granted percentage	Assessment method
R3, R5, R6	30,00%	Final test and/or final work
R3, R5	15,00%	Participation in programmed activities
R1, R2, R4	55,00%	Presentation of works and projects

Observations

To add the percentages, it is essential to pass each and every one of the assessment instruments. 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. 85% of the grade is collected in a final exam (55% resolution of anatomical practical cases in theoretical questions and 30% in the identification of anatomical structures in the same objective test)

MENTION OF DISTINCTION:

According to Article 22 of the Regulations governing the Evaluation and Qualification of UCV Courses, the mention of "Distinction of Honor" may be awarded by the professor responsible for the course to students who have obtained, at least, the qualification of 9 over 10 ("Sobresaliente"). The number of "Distinction of Honor" mentions that may be awarded may not exceed five percent of the number of students included in the same official record, unless this number is lower than 20, in which case only one "Distinction of Honor" may be awarded.

Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

- M1 Presentation of contents by the teacher, analysis of competencies, explanation and demonstration of abilities, skills and knowledge in the classroom.
- M2 Specific instructions about group and individual assignments for each topic.
- M3 Group work sessions supervised by the teacher. Study of legal cases, both real and fictitious, analysis, diagnosis, problems, field study, computer room, visits, data search, libraries, network, Internet, etc. Significant construction of knowledge through student interaction and activity. Critical analysis on values and social commitment.
- M4 Application of interdisciplinary knowledge.
- M5 Supervised monographic sessions with shared participation
- M6 Personalized attention and in small groups. Period of instruction and/or orientation carried out by a tutor with the objective of reviewing and discussing the materials and topics presented in the classes, seminars, readings, completion of assignments, etc.
- M7 Set of oral and/or written tests used in the initial, formative or summative evaluation of the student.
- M8 Group preparation of readings, assumptions and problem -olving to present, discuss or deliver in class or tutorial.



- M9 Student's study: Individual reading preparation, case studies, jurisprudence. Writings and papers to be presented or delivered in the classes or tutorials.
- M17 Expository Method /Master Class
- M18 Exercise and problem solving
- M19 Case method
- M20 Course works and tasks
- M21 Project-oriented learning
- M22 Guided Practice through debates, resolution of problems and exercises in the virtual classroom.



IN-CLASS LEARNING

IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
In-person class M1	R1, R2, R3, R4, R5	15,00	0,60
Practical class M2, M3	R2, R5, R6	30,00	1,20
Seminar M5	R2, R6	2,50	0,10
Group work presentation M6	R1, R3, R4	5,00	0,20
Tutorial M2, M6	R1, R5	5,00	0,20
Evaluation M7	R1, R2, R3, R4, R5	2,50	0,10
TOTAL		60,00	2,40

LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
Group work M4, M8	R1, R5, R6	30,00	1,20
Individual work M4, M9	R2, R3, R4	60,00	2,40
TOTAL		90,00	3,60



ON-LINE LEARNING

SYNCHRONOUS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
Master Class M17, M18	R1, R3, R4, R5	15,00	0,60
Practical activity M18, M19	R5, R6	25,00	1,00
Tutorial M17	R1, R5	10,00	0,40
TOTAL		50,00	2,00

ASYNCHRONOUS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
Individual or group work of students M20	R2, R3, R4, R6	90,00	3,60
Activities through virtual resources M18, M22	R1, R4, R6	2,50	0,10
Access and research on complementary contents M18	R6	5,00	0,20
Individual study M20	R1, R2, R3, R4, R5, R6	2,50	0,10
TOTAL		100,00	4,00



Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
INTRODUCTION	INTRODUCTION TO THE STUDY OF HUMAN ANATOMY AND PHYSIOLOGY. Spatial Terminology and Generalities
EMBRYOLOGY AND HISTOLOGY	Basic concepts of human embryology and histology
LOCOMOTOR SYSTEM	Osteology and general myology. Joint physiology
CARDIOCIRCULATORY SYSTEM	Heart. Arterial system. Venous system. Lymphatic system.
RESPIRATORY SYSTEM	Structure and general function of the system. Conduction pathways, alveoli, capillary-alveolar structure, pleurae and ventilation
DIGESTIVE SYSTEM	Digestive tract, Digestive splanchnology, peristalsis, main secretory structures, villi structure, hepatic portal system.
UROGENITAL SYSTEM	Splanchnology and urinary tract. Male and female sexual organs.
ENDOCRINE SYSTEM AND NERVOUS SYSTEM	ENDOCRINE SYSTEM NERVOUS SYSTEM: ORGANIZATION. Ascending and descending pathways, reflex arches, spinal and cranial nerves. Sense organs.



Temporary organization of learning:

Block of content	Number of sessions	Hours
INTRODUCTION	2,00	4,00
EMBRYOLOGY AND HISTOLOGY	2,00	4,00
LOCOMOTOR SYSTEM	10,00	20,00
CARDIOCIRCULATORY SYSTEM	2,00	4,00
RESPIRATORY SYSTEM	2,00	4,00
DIGESTIVE SYSTEM	2,00	4,00
UROGENITAL SYSTEM	2,00	4,00
ENDOCRINE SYSTEM AND NERVOUS SYSTEM	8,00	16,00

References

Basic

Estructura y función del cuerpo humano. Kevin Patton 16th Edition - (2020) - Elsevier
Sobotta. Texto de anatomía. Waschke, J. Koch, M. Kürten, S. Tanzil-Schulze, G. y Spittau, B. Ed. ELSEVIER (2018)
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)

Complementary:

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. Elsevier (2023)



Addendum to the Course Guide of the Subject

Due to the exceptional situation caused by the health crisis of the COVID-19 and taking into account the security measures related to the development of the educational activity in the Higher Education Institution teaching area, the following changes have been made in the guide of the subject to ensure that Students achieve their learning outcomes of the Subject.

Situation 1: Teaching without limited capacity (when the number of enrolled students is lower than the allowed capacity in classroom, according to the security measures taken).

In this case, no changes are made in the guide of the subject.

Situation 2: Teaching with limited capacity (when the number of enrolled students is higher than the allowed capacity in classroom, according to the security measures taken).

In this case, the following changes are made:

1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject will be made through a simultaneous teaching method combining onsite teaching in the classroom and synchronous online teaching. Students will be able to attend classes onsite or to attend them online through the telematic tools provided by the university (videoconferences). In any case, students who attend classes onsite and who attend them by videoconference will rotate periodically.

In the particular case of this subject, these videoconferences will be made through:

☒ Microsoft Teams

☒ Kaltura



Situation 3: Confinement due to a new State of Alarm.

In this case, the following changes are made:

1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject, as well as the group and personalized tutoring, will be done with the telematic tools provided by the University, through:

☒ Microsoft Teams

☒ Kaltura

Explanation about the practical sessions:

Se adaptarán a las posibilidades de las herramientas telemáticas.



2. System for Assessing the Acquisition of the competences and Assessment System

ONSITE WORK

Regarding the Assessment Tools:

☒ The Assessment Tools will not be modified. If onsite assessment is not possible, it will be done online through the UCVnet Campus.

☐ The following changes will be made to adapt the subject's assessment to the online teaching.

Course guide		Adaptation	
Assessment tool	Allocated percentage	Description of the suggested changes	Platform to be used

The other Assessment Tools will not be modified with regards to what is indicated in the Course Guide.

Comments to the Assessment System:

The practices will be adapted to the possibilities of telematic tools.