



## Information about the subject

**Degree:** Bachelor of Science Degree in Dentistry

**Faculty:** Faculty of Medicine and Health Sciences

**Code:** 481104 **Name:** Embryology and General Anatomy I

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

**Module:** Module 1: Relevant Basic Biomedical Sciences in Dentistry

**Subject Matter:** HUMAN ANATOMY **Type:** Basic Formation

**Field of knowledge:** Health Sciences

**Department:** Anatomy and Physiology

**Type of learning:** Classroom-based learning

**Languages in which it is taught:** English, Spanish

### Lecturer/-s:

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## Module organization

### Module 1: Relevant Basic Biomedical Sciences in Dentistry

Subject Matter	ECTS	Subject	ECTS	Year/semester
HUMAN ANATOMY	12,00	Embryology and General Anatomy I	6,00	1/1
		General Anatomy II and Oral Anatomy	6,00	1/2
Biology	18,00	Biology	6,00	1/1
		Histology	6,00	1/2
		Microbiology	6,00	1/2
Physiology	6,00	Human and Oral Physiology	6,00	1/2
Biochemistry	6,00	Biochemistry	6,00	1/1
MODERN LANGUAGE	12,00	Modern Language: English	6,00	2/2
		Modern language: Spanish	6,00	2/2

## Recommended knowledge

·No basic knowledge is 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 The student knows and discriminates the steps of embryogenesis from gametogenesis to the complete formation of the embryo.
- R2 Knows the main concepts that make up anatomical terminology, its foundations and clinical and surgical utility.
- R3 The student distinguishes the different anatomical osteomuscular structures of the human body.
- R4 Uses dissection instruments in practical work.
- R5 Applies general knowledge of anatomy.
- R6 Looks for bibliographic information from different sources and knows how to use it in a critical and constructive way.
- R7 Identifies the interactions between the organs and systems studied.
- R8 Knows how to search for information from different sources and analyse it with a critical and constructive spirit.



## 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 I aCapacity for analysis and synthesis				X
CG2 I bOrganizational and planning skills				X
CG12 FInterpersonal skills		X		
CG13 FRecognition of diversity and multiculturalism	X			
CG4 I dKnowledge of a foreign language		X		

TRANSVERSAL	Weighting			
	1	2	3	4
1. a. Analysis and synthesis skills				X
1. b. Organizational and planning capacity				X
1. c. Oral and written communication in the native language.				X
1. d. Knowledge of a foreign language		X		
1. e. Computer skills		X		
1. f. Information management capacity				X
1. g. Problem solving				X
2. i. Teamwork			X	



2. l.	Interpersonal skills			X	
2. m.	Recognition of diversity and multiculturalism			X	
2. n.	Critical Reasoning				X
3. p.	Autonomous learning			X	
3. q.	Adaptation to new situations			X	
3. r.	Creativity				X
3. s.	Leadership				X
3. v.	Motivation for quality				X



## Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
	20,00%	OPEN QUESTIONS: Written exam in which basic theory knowledge and the ability to relate, integrate and coherently express it in writing is assessed.
	45,00%	MULTIPLE CHOICE TEST: Multiple choice test with one correct answer. This shows to greater extent the contents acquired by the student.
	5,00%	CLASS PARTICIPATION: The teacher assesses the participation, involvement and progress the student makes in acquiring knowledge and skills in theory and practical classes and seminars. This is never more than 5% of the final grade.
	30,00%	PRACTICAL EXAM: The student carries out a test in which he/she must show by means of practical application the acquisition of certain knowledge. For example, histological or anatomopathological diagnoses, interpretation of images or diagnostic tests.

### Observations

To pass the course, a 5-point grade or higher must be obtained, both in the theory and practice parts of the course.

In case only one of the course parts (theory or practice) is completed in the 1st call, the course will not be passed but the grade of the completed part will be kept for the 2nd call. In case only one part of the course is completed after the 1st and 2nd calls, the grade of the completed part will not be saved for the next academic year.

Attendance to the practices is mandatory, and absences must be always justified.

- In case there is 1 justified absence to the practices, the student will be allowed to take the exam at the 1st and 2nd calls normally.
- In the event of 2 justified absences to the practices, the student will not be allowed to take the exam in the 1st call but will be able to take the 2nd call exam.
- In case there are more than 2 justified absences to the practices, the student will not be allowed to



take the exam either in the 1st or 2nd call, and will have to enroll again in the course in the following academic year.

- In case there is 1 unjustified absence to the practices, the student will not be allowed to take the exam in the 1st call but will be able to do it in the 2nd.

- In case of 1 unjustified absence and a 1 justified absence, the student will not be allowed to take the exam either in the 1st or 2nd call, and will have to enroll again in the course in the following academic year.

## Award of Honors

Honors may be awarded to the best students provided they achieve an overall grade equal to or higher than 9. The maximum number of Honors awarded will follow the following rule:

- From 1 to 39 enrolled students: 1 Honors
- From 39 to 59 enrolled students: 2 Honors
- From 60 to 79 students enrolled: 3 Honors

## 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
- Lecture.
  - Problem Solving.
  - Explanation of contents by the teacher.
  - Explanation of knowledge and skills.



- M2 Practical basic sciences laboratory sessions, practical simulation laboratory sessions, virtual hospital and dissecting room.
- M10 Carrying out bibliographic reviews and practical work experience dissertations.
- M12 Seminars, supervised monographic classes with shared participation.
- M13 Personal preparation of written texts, essays, problem solving, seminars.
- M15 Personalised Attention. Period of instruction and/or guidance carried out by a tutor with the aim of analysing with the student his/her work, activities and evolution in learning of subjects.





## IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
<b>THEORY CLASS</b> M1, M10, M12, M15	R1, R2, R3, R6, R7, R8	38,00	1,52
<b>SEMINAR</b> M10, M12, M13	R1, R2, R3, R5, R6, R7, R8	8,00	0,32
<b>TUTORING</b> M15	R6, R8	2,00	0,08
<b>EVALUATION</b> M10, M12, M13	R1, R2, R3, R5	2,00	0,08
<b>PRACTICAL CLASS</b> M2	R2, R3, R4, R5	10,00	0,40
<b>TOTAL</b>		<b>60,00</b>	<b>2,40</b>

## LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
<b>INDIVIDUAL WORK</b> M10, M13, M15	R1, R3, R5, R6, R7, R8	90,00	3,60
<b>TOTAL</b>		<b>90,00</b>	<b>3,60</b>



## Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
UNIT 1	Histology
UNIT 2	General concepts of Anatomy. Organization and levels of the human body. Organs and systems. Anatomical positions and planes. Anatomical-medical terminology.
UNIT 3	General Embriology
UNIT 4	Locomotor system. Spinal column. Thoracic cage. Musculature of the back, thorax and abdominal wall. Upper limb: bones, muscles and vascularization. Lower limb: bones, muscles and vascularization.
UNIT 5	Anatomy of the heart. Layers. Chambers. Cardiac vascularization and innervation. Large arterial vessels: structure, classification, location and general distribution. Large venous and lymphatic vessels: structure and general distribution.
UNIT 6	Anatomy of the respiratory system: upper and lower respiratory tract.
UNIT 7	Digestive system: general study, vascularization. Mouth, esophagus, stomach and duodenum. Small intestine, large intestine and rectum. Annexed organs.
UNIT 8	Renal and excretory system: urinary tract. Female genital system: Ovary, tubes, uterus, vagina and external genitalia. Male genital system: testicle and sheaths. Seminal tract. External genitalia.
UNIT 9	Neuroendocrine system: pituitary, thyroid, parathyroid and adrenal.



## UNIT 10

Nervous system. Concept of nervous system. Classification. Autonomic nervous system. Study of the spinal cord and brainstem, cerebrum and cerebellum.

## PRACTICE

PRACTICE 1. Osteology  
PRACTICE 2. Musculoskeletal  
PRACTICE 3. Splacnology  
PRACTICE 4. Nervous system  
PRACTICE 5. Review



## Temporary organization of learning:

Block of content	Number of sessions	Hours
UNIT 1	1,00	2,00
UNIT 2	1,00	2,00
UNIT 3	5,00	10,00
UNIT 4	5,00	10,00
UNIT 5	2,00	4,00
UNIT 6	2,00	4,00
UNIT 7	2,00	4,00
UNIT 8	2,00	4,00
UNIT 9	2,00	4,00
UNIT 10	3,00	6,00
PRACTICE	5,00	10,00



## References

- Suárez Quintanilla J. HUMAN ANATOMY FOR HEALTH SCIENCE STUDENTS. Elsevier. 2nd Edition. 2020
  - Gilroy. Prometheus. ANATOMY FOR THE STUDENT. 2nd edition. 2020
  - Waschke, Koch. TEXT OF ANATOMY. Elsevier. 1st Edition 2018
  - Wineski Lawrence. CLINICAL ANATOMY BY REGIONS. 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. ANATOMIC NOMENCLATURE ILLUSTRATED Ed. Masson 6th Edition. 2021
- Supplementary bibliography:
- Sobotta - R. Putz. SOBOTTA. ATLAS OF HUMAN ANATOMY 3 VOLS. Elsevier. 24 Edition 2018
  - Netter F. ATLAS OF HUMAN ANATOMY. Elsevier. 7th Edition. 2019



## 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:



## 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: