Human Anatomy

Code: 107952
ECTS Credits: 6

2025/2026

Degree	Type	Year
Biomedical Sciences	FB	1

Contact

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Teaching groups languages

You can view this information at the end of this document.

Prerequisites

This course has no established prerequisites. Since the student will be doing practical work in the dissection room/osteotheque, they must have a safety certificate proving they have passed the specific test on "best practices in the dissection room" and must maintain a professional ethical attitude in all their actions.

Objectives and Contextualisation

The objectives are the study of the general anatomical organization of the human body. This course naturally continues in the subjects *Structure and Function of the Nervous System* and *Developmental Biology and Teratology*.
Students who have passed this course should be able to describe, using international anatomical terminology, and recognize the anatomical structures that make up the different parts of the human body in a healthy state.

Learning Outcomes

1. CM01 (Competence) Analyse anatomical differences by sex/gender.
2. CM02 (Competence) Draw on the anatomical foundations of different systems to explain how the human body functions.
3. CM03 (Competence) Design research experiments on anatomical topics relevant to the biomedical field, using reliable scientific sources.
4. KM01 (Knowledge) Describe the general anatomical organisation of healthy human organs and systems.
5. KM02 (Knowledge) Define the relationships between the different anatomical structures of the human body.
6. SM01 (Skill) Identify and analyse anatomical components at different levels of organisation.
7. SM02 (Skill) Understand international anatomical nomenclature.
8. SM03 (Skill) Identify visible anatomical structures and their relationship with their function in healthy conditions and in possible pathologies.

Content

THEORETICAL CLASSES (Type TE): A total of 42 hours of theory will be scheduled.

TOPIC 1: GENERAL ANATOMY

INTRODUCTION TO ANATOMY. Fundamental concepts for anatomical study: anatomical position, axes, planes, and reference points for studying the human body. International anatomical terminology.
GENERALITIES OF THE SKELETAL SYSTEM. Bones and cartilages: structure, functions, and classification.
GENERALITIES OF THE ARTICULAR SYSTEM. Morphological and functional classification. Study of synovial joints (diarthroses). Articular appendages. GENERALITIES OF THE MUSCULAR SYSTEM. Muscle classification. Muscular appendages. GENERALITIES OF THE NERVOUS SYSTEM. Central and peripheral nervous system. General considerations of the brain and spinal cord. Spinal and cranial nerves.
GENERALITIES OF THE VASCULAR SYSTEM. Arteries and veins. Systemic (major) circulation. Pulmonary (minor) circulation. Fetal circulation. Generalities of the heart. Lymphatic system.

TOPIC 2: ANATOMY OF THE UPPER LIMB

JOINTS OF THE UPPER LIMB. Shoulder girdle joints. Glenohumeral. Elbow. Radioulnar joints. Radiocarpal and hand joints. MUSCLES OF THE UPPER LIMB. Shoulder girdle muscles. Thoracobrachial muscles. Muscles of the arm (anterior and posterior compartments). Muscles of the forearm (anterior and posterior compartments). Muscles of the hand. INNERVATION OF THE UPPER LIMB. Brachial plexus. Nerves of the upper limb.

TOPIC 3: ANATOMY OF THE LOWER LIMB

JOINTS OF THE LOWER LIMB. Sacroiliac. Pubic symphysis. Hip joint. Knee. Tibiofibular joints. Ankle and foot joints.
MUSCLES OF THE LOWER LIMB. Muscles of the pelvic girdle. Muscles of the thigh (anterior, medial, and posterior compartments). Muscles of the leg (anterior, posterior, and lateral compartments). Muscles of the foot.
INNERVATION OF THE LOWER LIMB. Lumbar and sacral plexuses. Nerves of the lower limb.

TOPIC 4: ANATOMY OF THE HEAD AND TRUNK

CRANIAL JOINTS. Sutures and temporomandibular joint. TRUNK JOINTS. Intersomatic and zygapophyseal joints. Craniovertebral joints. Lumbosacral and sacrococcygeal joints. MUSCLES OF THE HEAD. Mimetic muscles. Masticatory muscles. MUSCLES OF THE NECK. Suprahyoid, infrahyoid, prevertebral, lateral, and posterior muscles. MUSCLES OF THE TRUNK. Paravertebral muscles. Intercostal muscles. Diaphragm. Abdominal wall muscles. Pelvic diaphragm and perineum. TOPOGRAPHIC ANATOMY OF THE TRUNK. Inguinal region. Cervical plexus. Innervation of the diaphragm and trunk.

TOPIC 5: SENSORY ORGANS

VISUAL ORGAN. Eyeball: layers and contents. Sclera, uvea, and retina. Vitreous humor and aqueous humor. Ocular appendages: eyelids and conjunctiva. Extraocular muscles. Lacrimal apparatus.
AUDITORY AND BALANCE ORGAN. External ear: auricle, external auditory canal, and tympanic membrane. Middle ear: tympanic cavity and ossicular chain. Inner ear: bony and membranous labyrinth, cochlea, and vestibular system.

TOPIC 6: CARDIOVASCULAR SYSTEM

HEART ANATOMY. Position and relations. Mediastinum and thymus. Pericardium. External and internal anatomy: chambers and valves. Fibrous skeleton and conduction system. Coronary arteries and cardiac veins.
VESSELS OF THE PULMONARY CIRCULATION. Pulmonary artery and pulmonary veins.
ARTERIES OF THE SYSTEMIC CIRCULATION. Aorta: collateral and terminal branches. Common carotid. External and internal carotid arteries. Carotid sinus. Subclavian artery. Arteries of the upper limb. Parietal and visceral branches of the descending aorta. Common, internal, and external iliac arteries. Arteries of the lower limb.
VEINS OF THE SYSTEMIC CIRCULATION. Superior vena cava system and its tributaries. Venous drainage of

the upper limb. Inferior vena cava system and its tributaries. Venous drainage of the lower limb. Intercaval systems. Portal vein system.
LYMPHATIC SYSTEM. Organization. Lymph node groups.

TOPIC 7: RESPIRATORY SYSTEM

GENERALITIES OF THE RESPIRATORY SYSTEM. Upper and lower respiratory tract.
NOSE AND PARANASAL SINUSES. Nasal pyramid. Nasal cavities. Paranasal sinuses.
PHARYNX (covered in Topic 8).
LARYNX. Cartilages. Membranes. Intrinsic muscles of the larynx.
TRACHEA AND BRONCHIAL TREE. Structure of the trachea. Bronchial division.
LUNGS. External morphology. Pulmonary division. Pulmonary hilum. Pleurae.
RELEVANT ASPECTS OF VASCULARIZATION AND INNERVATION OF THE RESPIRATORY SYSTEM. Blood supply and innervation of the nasal cavity. Innervation of the larynx. Innervation and lymphatic drainage of the lungs and pleurae.

TOPIC 8: DIGESTIVE SYSTEM

GENERALITIES OF THE DIGESTIVE SYSTEM. Structure and organization. Digestive tract. Accessory glands.
MOUTH. Lips. Tongue. Palate. Floor of the mouth. Teeth.
PHARYNX. Nasopharynx, oropharynx, and hypopharynx. Pharyngeal muscles. Parapharyngeal space.
THYROID AND PARATHYROID GLANDS.
ESOPHAGUS. Sections and anatomical relations. Pharyngoesophageal and gastroesophageal junctions.
ABDOMEN. Abdominal regions. Abdominal cavity and peritoneum. Stomach. Duodenum. Pancreas. Liver and biliary tract. Spleen. Jejunum and ileum. Cecum and vermiform appendix. Colon. Rectum.
VASCULARIZATION OF THE DIGESTIVE SYSTEM. Arterial supply and venous drainage of digestive organs. Portal circulation. Portosystemic anastomoses. Lymphatic drainage of the digestive system.
INNERVATION OF THE DIGESTIVE SYSTEM.

TOPIC 9: UROGENITAL SYSTEM

KIDNEY. Protective layers and fixation structures. Renal parenchyma. Renal sinus.
URINARY TRACT. Intrarenal pathway. Ureter. Bladder. Male and female urethra.
MALE REPRODUCTIVE SYSTEM. Scrotum. Testis. Spermatic pathway: epididymis, vas deferens, and ejaculatory ducts. Accessory glands: prostate, seminal vesicles, and bulbourethral glands. External genitalia.
FEMALE REPRODUCTIVE SYSTEM. Ovaries. Uterine tubes. Uterus: morphology and fixation structures. Vagina and anatomical relations. External genitalia. Mammary gland.
VASCULARIZATION AND INNERVATION OF THE UROGENITAL SYSTEM. Relevant aspects of blood supply and innervation.

TOPIC 10: ENDOCRINE SYSTEM

Glands located in the neck and trunk: thyroid, parathyroid, adrenal gland.

SEMINARS (Type SEM)

Four 1-hour seminars are scheduled:

- Seminar 1: Osteology of the upper limb
- Seminar 2: Osteology of the lower limb
- Seminar 3: Osteology of the trunk and pelvis
- Seminar 4: Skull

LABORATORY PRACTICALS (Dissection Room) (Type PLAB)

Five 2-hour practical sessions are scheduled.
To access the dissection room, it is MANDATORY to wear a lab coat and gloves, as well as comply with any other established safety measures. A safety certificate proving the student has passed the specific test on best practices in the dissection room is also required. Taking photos and/or videos in the dissection room is NOT allowed.

- PLAB 1: General overview. Circulatory system: arterial, venous, and lymphatic systems
- PLAB 2: Trunk and limbs: muscles, joints, vascularization, and innervation
- PLAB 3: Head and neck: musculature, vascularization, and innervation. Senses: eye and ear
- PLAB 4: Head, neck, and thoracic cavity: respiratory system, supradiaphragmatic digestive system, and heart
- PLAB 5: Abdominopelvic cavity: infradiaphragmatic digestive system and urogenital system

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Laboratory practices (dissection lab)	10	0.4	
Seminars (ostheology)	4	0.16	
Theory	42	1.68	
Type: Supervised			
Tutorials	10.5	0.42	
Type: Autonomous			
Preparation of the written works, self-study, comprehensive reading	75	3	

METHODOLOGY

Theoretical classes: Systematic presentation of the course syllabus, emphasizing the most important concepts. Students acquire the basic knowledge of the subject by attending lectures and complementing them with personal study of the topics covered. A total of 42 hours of theory are scheduled.

Seminars: Sessions dedicated to the study of osteology. Guided study of human bone specimens and anatomical models.

Laboratory practicals: Students attend the dissection room in small groups to study the different thematic contents of the course using anatomical preparations of human specimens and anatomical models.

Tutorials: Tutorials will be conducted individually in the professor's office (by appointment) or via email. The aim of the tutorials is to clarify concepts, reinforce acquired knowledge, and support students in their study process.

Autonomous activities: Comprehensive reading of texts and articles. Personal study. Creation of diagrams and summaries. Conceptual assimilation of the course content.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Assessment

Continous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
First partial exam (lab)	35%	2	0.08	CM01, KM01, SM01, SM02, SM03
First partial exam (test)	12.5%	2	0.08	CM01, CM02, CM03, KM01, KM02, SM01, SM02, SM03
Lab continuous assessment	5	0.5	0.02	CM01, KM01, SM01, SM02, SM03
2nd partial exam (lab)	12.5%	2	0.08	CM01, KM01, SM01, SM02, SM03
2nd partial exam (test)	35%	2	0.08	CM01, CM02, CM03, KM01, KM02, SM01, SM02, SM03

Continuous Assessment

The course will be assessed through the following tests

Midterm exams: Two midterm exams will be scheduled. Each midterm will consist of a multiple-choice test assessing theoretical content and a structure identification exam assessing practical and seminar content.
Continuous assessment of practicals: At the end of each practical session, an exercise identifying anatomical structures will be conducted.

Content of the tests

First midterm
Theoretical topics 1 to 5
PLABs 1 to 3
Seminars 1 to 4

Second midterm
Theoretical topics 6 to 10
PLABs 4 and 5

Characteristics of the tests

Theoretical exams (multiple choice): The theoretical content will be assessed through a multiple-choice test. Each question will have 4 possible answers and only one correct. Incorrect answers will be penalized by 1/3 of a point. Blank answers will not be penalized.
Practical exam: This will consist of identifying anatomical structures studied in practicals and seminars using photographic images. Students must name the indicated structures. Incorrect answers will not be penalized.
Continuous assessment of practicals: The assessment will consist of in situ identification on dissection specimens of a series of anatomical structures studied during the practical session.
Specific weight of the tests

First midterm 47.5% (Test exam 35% + Practical exam 12.5%)
Second midterm 47.5% (Test exam 35% + Practical exam 12.5%)
Continuous assessment of practicals 5% (average of all exercises)

Grade calculation and passing criteria

To calculate the grades, the following formula will be applied:

First midterm grade = (Test grade x 0.74) + (Practical grade x 0.26)
Second midterm grade = (Test grade x 0.74) + (Practical grade x 0.26)
Final grade = (First midterm grade x 0.475) + (Second midterm grade x 0.475) + (Continuous practical assessment grade x 0.05)
To pass the course, the following criteria must be met:

The grade for each midterm, according to the formula indicated for each exam, must be equal to or greater than 5.0.
The result of the final grade calculation according to the indicated formula must be equal to or greater than 5.0
Other considerations:

Students who DO NOT take both midterm exams will be considered not assessable.
There are no mandatory attendance activities in this course.

Resits and Grade Improvement

Students who have not met the passing criteria may take a resit exam for the corresponding material to meet the required standards. Likewise, students wishing to improve their grade may retake the exams, provided they waive the previously obtained grade.

Resit exams will have the same characteristics as the midterm exams.

Continuous assessment of practicals is not eligible for resit.

Single Assessment

This course allows for a single assessment option. Students opting for this must request it in advance according to the procedures established by the Academic Management of the Faculty of Biosciences.

The single assessment will consist of completing both midterms on the day scheduled for the resit of continuous assessment.

In this case, the following formulas will be applied to calculate the grades:

First midterm grade = (Test grade x 0.7) + (Practical grade x 0.3)
Second midterm grade = (Test grade x 0.7) + (Practical grade x 0.3)
Final grade = weighted average of both midterms
The passing criteria will be the same as those specified for continuous assessment.

If the student does not pass the single assessment, they will have the right to resit the theoretical or practical exams they deem necessary to meet the passing criteria. In this case, theoretical exams will consist of short-answer questions instead of multiple-choice.

Bibliography

Bibliography

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Software

Is not necessary

Groups and Languages

Please note that this information is provisional until 30 November 2025. You can check it through this link. To consult the language you will need to enter the CODE of the subject.

Name	Group	Language	Semester	Turn
(PLAB) Practical laboratories	511	Catalan	second semester	morning-mixed
(PLAB) Practical laboratories	512	Catalan	second semester	morning-mixed
(SEM) Seminars	511	Catalan	second semester	morning-mixed
(SEM) Seminars	512	Catalan	second semester	morning-mixed
(SEM) Seminars	513	Catalan	second semester	morning-mixed
(TE) Theory	51	Catalan	second semester	morning-mixed