Teaching guide

IDENTIFICATION DETAILS

Degree:	Biomedicine
Scope	Biology and Genetics
Faculty/School:	Experimental Sciences
Course:	HUMAN ANATOMY OF ORGANS AND SYSTEMS
Type:	Compulsory
ECTS credits:	4,50
Year:	2
Code:	2144
Teaching period:	Third semester
Subject:	Human Anatomy
Module:	Structural and Functional Bases of Biomedicine
Teaching type:	Classroom-based
Language:	Spanish
Total number of student study hours:	112,50

SUBJECT DESCRIPTION

The course involves the study of the different organs and systems that comprise the body. The knowledge imparted will be related to previous courses in embryology and general anatomy. The anatomical variations of organs and systems, the topographic relationships between them, will be studied, and knowledge will be based on the study of physiology and pathophysiology. All this with special emphasis on obtaining professional competencies for future Biomedicine graduates.

GOAL

Establish the morphological and practical bases for the functioning of the human body's devices and systems.

The specific aims of the subject are:

Know, understand and know how to use anatomical terminology.

Know the anatomical structures and the relationships between them.

Know and understand the basic and functional anatomy of body organs (nervous, circulatory, respiratory, digestive and urogenital systems) .

Know how to recognize and interpret, from a practical point of view, the human anatomy of body organs.

Be able to describe the anatomical basis of pathology.

PRIOR KNOWLEDGE

The student must have basic knowledge in biology and anatomy from their previous studies, with regard to the structure and function of the human body.

COURSE SYLLABUS

1. Neuroanatomy: Generalities and organization. Central Nervous System. Peripheral Nervous System.
- Anatomy of the Spinal Cord. Spinal or spinal nerves.
- Brain and Cranial Nerves. Brain irrigation. Cerebrospinal fluid. Meninges.
- Motor and sensory systems.
2. Sense organs.
-Anatomy of the eyeball, auditory, gustatory and olfactory apparatus.
3. Cardiovascular system.
- Anatomy of the chest, thoracic cavity, mediastinum and pleural cavity.
-Anatomy of the heart, blood vessels and lymphatic vessels.
4. Respiratory system.
-Anatomy of the nostrils, larynx, trachea, bronchi, lungs and pleura.
5. Urinary system.
-Anatomy of the kidneys and urinary tract.
6. Digestive system.
-Anatomy of the mouth, pharynx, esophagus, stomach, small intestine, large intestine, liver, pancreas and biliary tract.
Anatomy of the abdominal cavity, peritoneum.
7. Male genital system.
-Anatomy of the testicles, male genital tracts, accessory glands and penis.
8. Female genital system.
-Anatomy of the ovaries, fallopian tubes, uterus, vagina and breasts.

EDUCATION ACTIVITIES

Participatory master class: Presentation of content in the classroom by the teacher with student participation. It is an appropriate way to introduce students to the subject to be taught, placing them in the context of the subject, using the appropriate audiovisual media. Practical classes. They will be developed in the Simulation Center after the theoretical subject classes. Depending on the unit, they will be made with anatomical pieces of corpses, models, anatomical sheets or other models. In them, the student will proceed to recognize the anatomical structures. This will allow the student to consolidate the knowledge previously acquired, to establish for themselves the cause-effect relationship, understanding what they do and what they see, and to develop the critical capacity provided by experimental work. These classes are MANDATORY. In these sessions, special respect for the rules of the dissection room and for the human condition is expected from each of the students, through adequate management of the anatomical pieces. Personalized and voluntary tutoring by the student, individually, in groups or through a virtual classroom. In them, the student will be able to answer any questions that may arise during the study of the subject. Evaluation. Different tests will be carried out to verify the acquisition of knowledge, skills and attitudes related to the corresponding competencies.

DISTRIBUTION OF WORK TIME

TEACHER-LED TRAINING ACTIVITIES	INDIVIDUAL WORK
49 Horas	63,50 Horas

LEARNING RESULTS

Know the structural organization of the main tissues in the human body, and their levels of organization in the formation of organs and systems.

Understand and recognize the structure of the human body, its possible anatomical variations and the organization of these structures into systems that allow it to be functionally correlated (both in the context of health and in the context of illness).

SPECIFIC LEARNING RESULTS

Recognize the normal morphology of the human body's organs and systems.
Relate the different structures to their corresponding function under normal conditions.
Use the knowledge acquired, both theoretical and practical, for the resolution of problems and practical cases.
Demonstrate respect for the human condition, through proper handling of corpses and anatomical pieces.

Relate the concepts learned during theory and practice classes with the normal development of the human being.
Lay the foundation for understanding physiological and pathophysiological processes.
Manage properly the different sources of information, including anatomical atlases, in their different axes and planes.

LEARNING APPRAISAL SYSTEM

Plagiarism, as well as the use of illegitimate means in evaluation tests, will be sanctioned in accordance with those established in the Evaluation Regulations and the University's Coexistence Regulations.

The evaluation will be carried out according to the following weighting:
- Theoretical written tests with test-type, short-answer or development questions: 60%. It will be assessed if the student has acquired a complete and reflective knowledge of the structure of the different devices or systems, trying to show if they have acquired sufficient integrative capacity to have a global vision of the human body.
- Written practical tests, identification questions with their respective complement: 35%. It will be assessed if the student is able to recognize different structures of the human body (organs, glands, nerves, arteries, veins,...) and relate them to each other. The practical test will be performed in the dissection room.
- Attendance and participation in face-to-face classroom activities: 5%.

Passing the subject:
To pass the subject, a minimum of 5/10 must be obtained in the total grade. It is only averaged once each of the parts of the exam has been passed.
To pass the theory exam, a minimum score of 5/10 must be achieved.
To pass the practical exam, a minimum score of 5/10 must be achieved.

With regard to practical classes, their attendance is mandatory. Only in extremely serious cases (to be determined by the teacher) will non-attendance be allowed on the date on which the student is officially summoned and the move to another group on another date. If they do not attend any of the sessions, the student must justify it properly and recover this practice (if there are still dates available). Failure to attend more than one of the practical sessions will mean not exceeding this section of the subject, and must be submitted to the extraordinary call for that part.

The internships will be developed at the Surgical Simulation Center (CSQ). Every student user of the CSQ is required to comply with established safety and health regulations, thus ensuring their safety and that of other users. Failure to comply with these rules, as well as the instructions of CSQ teachers and/or technicians, will entail a sanction to be decided by the degree director.

In short, it will be an essential requirement to pass the subject:
1) pass the theoretical written test (from the master classes),
2) attend each and every one of the practical classes,
3) pass the written practical test,
4) the delivery and presentation on due date of the exercises proposed by the teacher. If these requirements are not met, the student will not pass the call.

Extraordinary call:
To average the different parts that make up the final grade of a subject, each of them must be passed. Students can suspend the theoretical and/or practical part in the ordinary call and therefore take only the suspended part to the extraordinary call. Passing the subject will require obtaining a minimum grade of 5 in each of the sections, as described above.
The grade of the approved parts will be saved during the next academic year. In cases of third enrollment or higher, the internship and the corresponding evaluation will have to be repeated again.
Students who enroll in the subject for the second or successive time, and students with academic exemption, should contact the teacher in the first two weeks of the semester to find out about the evaluation criteria specific to their case.

ETHICAL AND RESPONSIBLE USE OF ARTIFICIAL INTELLIGENCE

1.- The use of any Artificial Intelligence (AI) system or service shall be determined by the lecturer, and may only be used in the manner and under the conditions indicated by them. In all cases, its use must comply with the following principles:
a) The use of AI systems or services must be accompanied by critical reflection on the part of the student regarding their impact and/or limitations in the development of the assigned task or project.
b) The selection of AI systems or services must be justified, explaining their advantages over other tools or methods of obtaining information. The chosen model and the version of AI used must be described in as much detail as possible.
c) The student must appropriately cite the use of AI systems or services, specifying the parts of the work where they were used and describing the creative process followed. The use of citation formats and usage examples may be consulted on the Library website(https://www.ufv.es/gestion-de-la-informacion_biblioteca/).
d) The results obtained through AI systems or services must always be verified. As the author, the student is responsible for their work and for the legitimacy of the sources used.
2.- In all cases, the use of AI systems or services must always respect the principles of responsible and ethical use upheld by the university, as outlined in the Guide for the Responsible Use of Artificial Intelligence in Studies at UFV. Additionally, the lecturer may request other types of individual commitments from the student when deemed necessary.
3.- Without prejudice to the above, in cases of doubt regarding the ethical and responsible use of any AI system or service, the lecturer may require an oral presentation of any assignment or partial submission. This oral evaluation shall take precedence over any other form of assessment outlined in the Teaching Guide. In this oral defense, the student must demonstrate knowledge of the subject, justify their decisions, and explain the development of their work.

BIBLIOGRAPHY AND OTHER RESOURCES

Basic

Tortora, Gerard J. Principles of Anatomy and Physiology/15th ed. Buenos Aires [etc.] :Editorial Panamericana, 2018.

Netter, Frank H. Atlas of Human Anatomy. 8th ed.
(Netter, Frank H. Atlas of Human Anatomy. 8th ed. , Barcelona: Elsevier, 2023.||Drake, Richard L. Gray: Anatomy for Students 5th ed.)

Additional

Purves, Dale. Neuroscience/ed. 5. copyright 2015.

Gilroy A.M.; Voll M, Karl Wesler. Prometheus: Anatomy. Student Handbook. 1st edition.
(Gilroy A.M.; Voll M, Karl Wesler. Prometheus: Anatomy. Student Handbook. 1st edition. , Pan-American Medicine, 2015.)