

Anatomy
Bachelor's Degree in Motor Sciences (3-year degree – class L-22)
BIO/16 – Anatomy
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2024-2025
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Antonello Ciccarelli AREA: Bio-medical NICKNAME: Ciccarelli Antonello EMAIL: antonello.ciccarelli@unicusano.it
The Human Anatomy module aims to provide the student with the skills necessary to fully understand the complexity of the human organism and the relationship between the different anatomical structures and their function. The student must be able to acquire correct anatomical terminology that will be very important in the interpretation and application that the graduate in motor sciences will then have to use in the planning and management of motor and sports activities
At the end of the course, the student must know and be able to describe:  • The morphology and structure of the cell, tissues, classification of bones, joints and muscles that characterize the anatomy in general
• Locomotor system: recognize the individual bones with their characteristics, know the architecture of the joints and their movements and also a broad study of myology with particular attention to the agonist and antagonist muscle groups that act on the movement.
<ul> <li>The student must also know and be able to describe: the organs that characterize the head, the neck, the thoracic cavity and the abdominal cavity, with particular reference to the cardio-respiratory, digestive, urinary and nervous systems.</li> </ul>
None

### Expected learning outcomes

In summary, the expected learning outcomes are:

KNOWLEDGE AND UNDERSTANDING: The course aims to provide in-depth knowledge of the architecture and structure of the human body and the acquisition of specific anatomical-functional skills of the musculoskeletal system and all the systems and apparatuses

APPLYING KNOWLEDGE AND UNDERSTANDING: The study of anatomy must provide the student with the basic knowledge to make correlations between the structures of the human body, their functions and the mechanisms that allow communication, control and integration of body functions to facilitate the approach to subsequent courses that require morphological knowledge

MAKING JUDGEMENTS: The student will be provided with all the skills for recognizing the anatomical structures of the human body.

COMMUNICATION SKILLS: At the end of the course, the student will have acquired an appropriate anatomical terminology, being able to adapt the forms of communication to the interlocutors

LEARNING SKILLS: Ability to update through the consultation of specific scientific publications in the sector and the use of the computer network. Ability to fully continue the studies, using the knowledge acquired during the course.

## Teaching organization

The Anatomy course requires 6 CFU, which correspond to a study load of at least 150 hours by the student. The course is developed through pre-recorded audio-video lessons, slides, handouts and other teaching support resources. The study materials, which are available on the platform, contain all the elements necessary to tackle the study of the subject.

The study load includes at least the following components:

- 126 hours of teaching for viewing and studying the pre-recorded lessons (7 hours of study for 1 hour of video-recorded lesson, of which 2 hours to listen to the lesson and 5 of self-learning to assimilate the contents of the lesson, for a total of 18 hours of video-recorded lessons);
- 24 hours of interactive teaching on the forum (virtual classroom) aimed at carrying out exercises and exercises proposed by the teacher, called e-tivities. These are exercises on specific parts of the program that prepare the student to take the final exam.

Self-assessment tests are also planned, asynchronous - which accompany the pre-recorded lessons and allow students to ascertain their understanding and level of knowledge of the contents of each lesson - and final self-assessment exercises, asynchronous - which correspond to exam tracks - which allow the student to verify the level of preparation achieved. This activity, which uses the tools provided on the platform, is also interactive and requires additional hours of study at the discretion of the student.

Finally, teaching uses synchronous tools such as web-conference reception and chats available on the platform in order to allow real-time interaction with registered students..

#### **Course contents**

- MODULE I GENERAL ANATOMY AND LOCOMOTOR SYSTEM (THE SKELETON) 3 HOURS OF VIDEO-RECORDED LESSONS FOR A COMMITMENT OF 21 HOURS OF STUDY
- 1. Introduction to anatomy
- 2. The Cell
- 3. Tissues
- 4. Tissues
- 5. The skeleton: Spine, Rib Cage
- 6. Upper Limb, Lower Limb
- MODULE II LOCOMOTOR SYSTEM (THE JOINTS) 3 HOURS OF VIDEO-RECORDED LESSONS FOR A COMMITMENT OF 21 HOURS OF STUDY
- 1. General
- 2. Spinal Column, Shoulder
- 3. Elbow. Wrist. Hand
- 4. Pelvis, Hip
- 5. Knee
- 6. Ankle, Foot

• MODULE III - LOCOMOTOR SYSTEM (MUSCLES) - 3 HOURS OF VIDEO-RECORDED LESSONS FOR A 21-HOUR STUDY COMMITMENT 1. Mm of the Trunk 2. Mm of the Spine 3. Mm of the Shoulder 4. Mm of the Arm and Forearm 5. Mm of the Abdomen and Diaphragm 6. Mm of the Hip, Thigh and Leg  $\bullet$  MODULE IV – SYSTEMS (CARDIOVASCULAR - RESPIRATORY) - 3 HOURS OF VIDEO-RECORDED LESSONS FOR A 21-HOUR STUDY COMMITMENT 1. Cardiovascular System 2. Cardiovascular System 3. Cardiovascular System 4. Respiratory System 5. Respiratory System 6. Respiratory System • MODULE V - SYSTEMS AND SYSTEMS (DIGESTIVE - URINARY - GENITAL - ENDOCRINE) - 3 HOURS OF VIDEO-RECORDED LESSONS FOR A COMMITMENT OF 21 HOURS OF STUDY 1. Digestive System 2. Digestive System 3. Different System 4. Urinary System 5. Genital System 6. Endocrine System • MODULE VI - SYSTEMS AND DEVICES (EYE - EAR - CNS) - 3 HOURS OF VIDEO-RECORDED LESSONS FOR A COMMITMENT OF 21 HOURS OF STUDY 1. CNS (Central Nervous System) 2. CNS (Central Nervous System) 3. Eye 4. Eye 5. Ear 6. Ear

#### Study materials

- 36 pre-recorded video lessons by the teacher divided into 6 modules
- Teaching materials by the teacher (handouts, slides and more)
- Recommended texts:
  - F. Martini, M. Timmons, R. Tallisch "Anatomia Umana" 7<sup>^</sup> Edizione Edises ISBN 978-88-3319-025-9
  - P. Carinci, E. Gaudio, G. Marinozzi et al. "Anatomia umana e istologia", 2<sup>^</sup> Edizione Elsevier ISBN 978-88-214-2692-6 eBook ISBN: 9788821434440
  - R. Soames, N. Palastanga "Anatomia umana e movimento" 7<sup>n</sup> Edizione Edra ISBN 978-88-214-5127-0 eBook ISBN 978-88-214-5128.7

## Learning assessment methods

The exam will normally consist of a written test or an oral test (a test method that can be carried out at the central office in Rome) aimed at ascertaining the analytical skills, the language skills and the ability to rework the concepts acquired.

The written test includes 30 multiple-choice questions that concern the entire teaching program

(The 30 multiple-choice questions relating to the contents of the exam program are assigned the value of 1 point for each correct answer)

The oral test consists of an interview aimed at ascertaining the student's level of preparation. The latter normally consists of 2 questions that concern the entire teaching program, each question has equal dignity and provides for a maximum score of 30.

In both exam methods, particular attention in the evaluation of the answers is given to the student's ability to rework, apply and present with language skills the material present on the platform.

# Criteria for the assignment of the final thesis

The assignment of the final thesis will be based on an interview with the professor in which the student will express his/her specific interests in relation to some topic that he/she intends to study in depth; there are no preclusions to the request for assignment of the thesis and there is no particular average required to request it.