Universidad Zaragoza

Academic Year/course: 2022/23

25640 - Human Anatomy I

Syllabus Information

Academic Year: 2022/23
Subject: 25640 - Human Anatomy I
Faculty / School: 127 - Facultad de Ciencias de la Salud
Degree: 605 - Degree in Physiotherapy
ECTS: 9.0
Year: 1
Semester: Annual
Subject Type: Basic Education
Module:

1. General information

1.1. Aims of the course

The course and his foreseen results correspond to the following planning and aims:
The general aim of this course is that the student, from his contents knowledge, will be able to explain the anatomical structures which make up, in each corporal region, the human locomotor system.
At the same time, he will be able to describe, with clearness and accuracy, the elements of bones, joints and muscles components, its morphology, disposition, principal function and topographic relations.
The pupil will be able to apply acquired anatomical knowledge to recognise and identify, by visual observation and palpation, the main reliefs of osteoarticular and muscular structures on the skin surface of the living and healthy human body.
These approaches and objectives are aligned with the following sustainable development goals (SDG) of the United Nations 2030 Agenda, in such a way that the acquisition of the learning outcomes of the subject provides training and competence to contribute to some extent to their achievement:
Target 3: Health and wellbeing
Target 4: Quality education
Target 5: Gender equality
Target 10: Reduction of inequalities
Target 17: Partnerships to achieve the objectives.

1.2. Context and importance of this course in the degree

This course is included in the basic subject of Health Sciences ?Anatomy?, which is divided into four courses: ?Human Anatomy I?, ?Human Anatomy II? and ?Kinesiology? which are taught in the first year of the Degree and ?Biomechanics and movement analysis?, taught in the second year of the Degree.

The course is taught on an annual basis, throughout the first and second four-month periods, with the aim of establishing the anatomical and structural foundations of the locomotor system that will be applicable and useful for the development of courses such as ?Kinesiology?, ?Physiology? and others that make up the studies of the Degree.

1.3. Recommendations to take this course

- Information and time management
- Adequate time scheduling for understanding, assimilation, study, work and preparation of the course
- High observation capacity and constancy in this visual work
- Analytical and synthesis skills
- An attitude of scientific curiosity and a willingness to constantly learn and improve.

2. Learning goals

2.1. Competences

Upon successful completion of the course the student will be more proficient at:
- Continuosly relate the morphology and structure of each anatomical element to the function it performs in the living and healthy human body
- Know how to select, systematise and prioritise anatomical knowledge according to clinical application and practical need
- Use and master most of the terminology on which they will base their technical expression in their professional life.

2.2. Learning goals

In order to pass this course, the student must demonstrate the following results:
- Understands, remembers, recognises and describes the nomenclature, precise location, structure, topographical arrangement and main functions of the human locomotor system elements in each body region
- Understands, remembers, recognises and describes the spatial relationships of anatomical structures
- Recognises, identifies and accurately points out the main osteoarticular and muscular reliefs on the human body surface in the living and healthy individual
- Recalls, recognises and describes the plexuses and nerves that constitute, with their paths and branches, the peripheral nervous system of the human body
- Continuosly and effectively relates the structure and morphology of each anatomical element to the function it performs in the living and healthy human body
- Respect practice materials, especially those derived from human remains
- Strives to develop and promote interpersonal relationships and teamwork.

2.3. Importance of learning goals

The learning goals will allow the student to be more and better prepared to understand the theoretical and methodological foundations of Physiotherapy and, therefore, to be better able to star planning professional action.

3. Assessment (1st and 2nd call)

3.1. Assessment tasks (description of tasks, marking system and assessment criteria)

The student must demonstrate that he/she has achieved the intended learning goals through the following assessment activities:

- Follow-up of practical classes
Assistance.
Active and efficient participation.
The student must demonstrate that he/she knows how to apply the theoretical bases of the course in the identification and recognition of anatomical structures and in the resolution of questions or practical assumptions, with precise, clear and argued language.
The student will be able to respect the practical material and, in particular, that which comes from human remains.
The student will strive to develop and promote interpersonal relationships and teamwork.
Oral practice exam, in the presence of the lecturer in charge of the course, if the objectives described above are not passed. Passing this oral examination is a prerequisite for taking the final theory examination.

- Two written exams
Partial theory exam, on a specified part of the programme, eliminating subject matter for the final exam of the first sitting: January 2023.
-Final theoretical exam of the entire course: May 2023, first call. June 2023, second call.
These tests consist of 10 to 12 developmental questions of medium length.
The answers must comply with the precise and complete explanation of the concepts and contents indicated in the statement.
The approximate duration of the test is 1 hour and 45 minutes.
Each question is evaluated on a scale of 0 to 10 points and then, the arithmetic mean and the grade for the exercise is obtained.
The final grade of the course will be obtained taking into account these two sections:

1. 75% of final grade corresponds to the examen grades.
2. The remaining 25% corresponds to the attendance and use of the practices, attendance to seminars and continuous evaluation of the student, observed and followed throughout the course.

The evaluation tests will be conducted in face-to-face mode if the situation allows it.

In case the conditions change, and if instructions are received from the academic authorities, the tests will be held in non-attendance mode using the online resources of the University of Zaragoza, wich will be notified in advance.

4. Methodology, learning tasks, syllabus and resources

4.1. Methodological overview

The methodology followed in this course is oriented towards the achievement of the learning objectives.

It favors the acquisition of knowledge related to health services.

A wide range of teaching and learning tasks are implemented, such as lectures, practice sessions, assignments, and autonomous work.

Students are expected to participate actively in the class throughout the course.

Further information regarding the course will be provided on the first days of class.

4.2. Learning tasks

This is a course organized as follows:

Lectures (70 hours) (learning results 1,2,3,4,5).

Theory sessions. Whole group sessions of 50 minutes each one.

The professor will explain the theoretical contents.

Certain contents can be available on the virtual platform Moodle.

Practice sessions (20 hours) (learning results 1,2,3,4,5,6,7).

Sessions in small/compact groups, where the students work with case studies and problem-solving tasks.

Autonomous work and study (learning results 1,2,3,4,5,7).

Time devoted to study the course contents and prepare the sessions and assignments.

The student must take responsibility in the schemes creation and working plan.

4.3. Syllabus

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4.3. Program

COURSE PROGRAM

Unit 1: Anatomy: Introduction and Generalities.

Theme 1.1: Anatomy. Concept and historic references. Anatomic posture. Corporal sprindles and corporal planes. Anatomical nomenclature and terminology.

Theme 1.2: Peripheral nervous system. Spinal nerves: Components, branches and nervous plexus.

Unit 2: Locomotor system. Trunk and neck.

Theme 2.1: Vertebral column. Vertebrae. Sacrum and coccyx. Column as a whole.

Theme 2.2: Pelvic girdle. Coxal bone.

Theme 2.3: Bones of the thoracic cage. Ribs. Sternum.

Theme 2.4: Joints and ligaments of the vertebral column.

Theme 2.5: Joints and ligaments of the thoracic cage.

Theme 2.6: Muscles of the back. Muscles of the nape of the neck.

Theme 2.7: Muscles of the neck.

Theme 2.8: Muscles of the thoracic wall. Respiratory muscles. Diaphragm.

Theme 2.9: Muscles of the abdominal wall. Muscles of the pelvic floor.

Theme 2.10: Vessels and nerves of trunk and neck.

Unit 3: Locomotor system. Lower limb.

Theme 3.1: Bones of the lower limb: Femur. Rotula. Tibia. Fibula.

Theme 3.2: Bones of the lower limb: Bones of the foot.

Theme 3.3: Pelvis joints and pelvis ligaments.

Theme 3.4: Hip joint. Muscles of the hip.

Theme 3.5: Muscles of the tigh.

Theme 3.6: Knee joint.

Theme 3.7: Tibiofibular joints. Ankle and foot joints.

Theme 3.8: Muscles of the leg. Muscles of the foot.

Theme 3.9: Vessels of the lower limb.

Theme 3.10: Nerves of the lower limb.

Unit 4: Locomotor system. Upper limb.

Theme 4.1: Bones of the upper limb: Scapular girdle. Humerus.

Theme 4.2: Bones of the upper limb: Bones of the forearm and hand.

Theme 4.3: Joints and muscles of the scapular girdle.

Theme 4.4: Shoulder joint. Muscles of the shoulder.

Theme 4.5: Elbow joint. Radioulnar joints. Muscles of the arm.

Theme 4.6: Wrist joint. Joints of the hand.

Theme 4.7: Muscles of the forearm.

Theme 4.8: Muscles of the hand.

Theme 4.9: Vessels of the upper limb.

Theme 4.10: Nerves of the upper limb.

Unit 5: Locomotor system. Head.

Theme 5.1: Skull bones. Skull vault and skull basis.

Theme 5.2: Facial bones. Orbit. Nasal cavity. Maxilla. Mandible.

Theme 5.3: Temporomandibular joint. Muscles of the mastication. Suprahyoid muscles.

Theme 5.4: Facial muscles. Mimic muscles.

4.4. Course planning and calendar

Presencial sessions:

Theory sessions. Whole group sessions of 50 minutes each one.

4 hours/week in the first four-month of the course.

1 hour/week in the second four-month of the course.

Practice sessions. Compact groups sessions of 50 minutes each one.

1 hour/week along the course.

Widterm exam. With ability of remove matter for june exam: January 2023.

Oral practice exam (In case of no superation in the practice sessions): May 2023 First call. June 2023 Second call.

Final exam: 18 May 2023, First call. 21 June 2023, Second call.

Further information concerning the timetable, classroom, office hours, assessment dates and other details regarding this course will be provided on the first days of class or please refer to the "Facultad de Ciencias de la Salud? (http://fcs.unizar.es).

4.5. Bibliography and recommended resources

The bibliography can be consult on:

http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=25640