

## 29204 - Human Anatomy I

### Syllabus Information

**Academic Year:** 2020/21

**Subject:** 29204 - Human Anatomy I

**Faculty / School:** 229 - Facultad de Ciencias de la Salud y del Deporte

**Degree:** 441 - Degree in Human Nutrition and Dietetics

**ECTS:** 6.0

**Year:** 1

**Semester:** First semester

**Subject Type:** Basic Education

**Module:** ---

### 1.General information

#### 1.1.Aims of the course

The subject and its expected results respond to the following approaches and objectives:

Know the anatomical elements that make up the different devices and systems of the healthy human

#### 1.2.Context and importance of this course in the degree

The subject, closely related to the so-called Physiology, enables the acquisition of knowledge

#### 1.3.Recommendations to take this course

It is a first-year course that as prerequisites has access to the Degree in Human Nutrition and

### 2.Learning goals

#### 2.1.Competences

Upon passing the subject, the student will be more competent to ...

Know the structure and function of the healthy human body at the level of the whole organism.

Understand and use, in the field of the subject, the terminology used in Health Sciences

#### 2.2.Learning goals

#### 2.3.Importance of learning goals

### 3.Assessment (1st and 2nd call)

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

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

## 4.2.Learning tasks

This course is organized as follows:

- **Lectures.** Expository, explanatory and / or demonstrative sessions of contents, using the blackboard and / or audiovisual material with computer support where the locomotor apparatus, the splanchnology and the nervous system of the human body are explained.
- **Practice sessions** Study of the morphology of the organs and systems of the human body through schemes, atlases, models and demountable models. If necessary, the study will be completed with radiological, ultrasound or CT / MRI images.
- Seminars, problem solving sessions and cases. When circumstances allow it, some seminars and problem solving sessions will be made in which questions raised during lectures will be answered.
- **Autonomous work and study.** Autonomous study and exam preparation.

## 4.3.Syllabus

This course will address the following topics:

### LOCOMOTIVE:

- General Human Anatomy. Anatomy in Bachelor of Dentistry. Definition, Norms, axes and reference planes. Introduction to the various systems of the body: locomotor, circulatory, respiratory, digestive, urogenital, nervous and endocrine systems.
- Skeleton of the trunk. spine, shoulder and pelvic girdle.
- Neuromuscular systems of the back, chest and anterior, lateral walls and the bottom of the abdomen. Roof of the abdomen and pelvic floor. Sensory innervation of the trunk. Blood circulation and venous return of the trunk.
- Topographic and applied anatomy of the trunk. Anatomy images.
- Skeleton of the upper limb. Joints and ligaments representative.
- Brachial plexus.
- Study of neuromuscular systems of the upper extremity: ulnar and median nerves, radial nerve, musculocutaneous nerve, circumflex and coracoid.
- Arterial and venous blood circulation of the upper limb. Sensory innervation of the upper limb.
- Topographical and applicative anatomy of the upper extremity. Imaging anatomy of the upper extremity.
- Skeleton lower extremity. Joints and ligaments representative.
- Lumbosacral plexus.
- Study of the neuromuscular system of the lower extremity: posterior thigh and buttock. Sciatic nerve. Crural and obturator nerves. Internal popliteal sciatic nerve, peroneal nerve and sole.
- Arterial and venous blood circulation of the lower extremity. Sensory innervation of the lower limb.
- Topographic and applied anatomy of the lower extremity. Anatomy images.

### SPLANCHNOLOGY:

- Heart. Configuration and heart and great vessels organization. Irrigation and innervation of the heart itself. Pericardium.
- Lung. Configuration and pulmonary Organization. Pleura.
- Topographical study of the thorax. Mediastinum, Timo and Mamas.
- Anatomical study of the digestive tract: esophagus, stomach. Thin, large intestine and rectum.
- Liver and biliary tract. Pancreas. Spleen.
- Anatomical study of the urinary system: Kidney. Configuration, organization and relationships. Urinary tract. Ureter, urinary bladder and urethra.
- Anatomical study of the genital tract: Female Genitalia: Ovary and Fallopian. Uterus Vagina. Vulva and annexed glands. Male genital organs: Testis and bags. Seminal tract, prostate and penis.
- Anatomical study of the bodies that constitute the endocrine system.
- Topographical study of the abdominal and pelvic cavity.

### CENTRAL NERVOUS SYSTEM

- Spinal cord. Configuration, structure and wraps. Afferent / efferent pathways and ascending / descending pathways.
- Brainstem. Configuration structure, function and vascularity of the brain stem.
- Cerebellum. Configuration, structure, function and vascularization of the cerebellum. Arqui, paleo and neocerebellum and brain stem formations related.
- Diencephalon. Diencephalon configuration. Thalamus, hypothalamus, pituitary gland.

- Epithalamus: pineal gland. Subthalamus and basal ganglia.
- Cerebrum. Internal and external configuration of the cerebrum. Structure of the cerebral cortex. Sensory cortex and cortex effector.
- Arterial and venous vasculature of the brain. Ventricular system, meninges and circulation L.C.R.

#### **INTRODUCTION TO THE STUDY OF HEAD AND NECK**

- Bony structures of the head and craniofacial Pits and mucous membranes. Temporomandibular joint
- Neuromuscular systems head and neck
- Salivary Glands and visceral structures of the head and neck
- Basic vascularization and innervation of head and neck

#### **4.4.Course planning and calendar**

Calendar of on-site sessions

- September: Locomotive
- October: Locomotor / Spacnology
- November: Splacnology / Nerveous System
- December: Basic elements in the anatomy of the head and neck
- January: Delivery and exhibition of works, seminars and finalization of clinical cases and practices.

Further information concerning the timetable, classroom, office hours, assessment dates and other details regarding this course will be provided on the first day of class or please refer to the Faculty of Health and Sport Sciences website and Moodle.

#### **4.5.Bibliography and recommended resources**

[http://biblos.unizar.es/br/br\\_citas.php?codigo=29204&year=2020](http://biblos.unizar.es/br/br_citas.php?codigo=29204&year=2020)