

HUMAN ANATOMY

Human Nutrition and Dietary Sciences (2019/20)

Code: 803970

Type: Core subject

Year: First

Semester: First Semester (Check the official calendar)

Department: Anatomy and Embryology

Credits: 6 ECTS

Teaching Staff

Javier Catón P.A.D. (Responsible of the Course)

javicaton@med.ucm.es

Competencies

Competencies are the corresponding to the module and subject matter:

General competencies:

- C.G.1.1.
- C.G.1.2.
- C.G.1.3.
- C.G.1.4.
- C.G.2.1.
- C.G.2.2.
- C.G.2.3.
- C.G.8.1.

Specific competencies:

- C.E.M1.1.
- C.E.M1.2.
- C.E.M1.3.
- C.E.M1.4.
- C.E.M1.5.
- C.E.M1.7.
- C.E.M1.9.
- C.E.M4.22.

Objectives

This course will be aim to give the students the needed anatomical basic knowledge to develop as health science's professionals. This course will also provide specific knowledge of the different organs and body systems within the human body. These competencies will guaranty a proper training in theory and practice. The knowledge acquired will enable the students to continue learning through out their academic and continuous education in the field of human nutrition.

Theoretical Program

- 1- General concepts and importance of anatomy: parts, methods and sources. The human body and anatomical terminology
- 2- Anatomical position. Axis, planes and points of reference, general and local terminology

- 3- Musculoskeletal system I. General concepts of bones
- 4- Musculoskeletal system II. General concepts of joints and muscles
- 5- Cardiovascular system. General concepts. Study of the whole heart, and the vascular system
- 6- Respiratory system. General concepts. Study of the lungs and relations
- 7- Urinary system. General concepts and relations
- 8- Male and female genital apparatus. General concepts and relations
- 9- Digestive system I. General concepts of the mouth and palate
- 10- Digestive system II. Oral cavity: gums, teeth, tongue and floor of the mouth.
- 11- Digestive system III. Masticatory muscles. Temporo-mandibular joint (TMJ)
- 12- Digestive system IV. Salivary glands and classification
- 13- Digestive system V. Pharynx. Anatomy and internal configuration
- 14- Digestive system VI. Esophagus: morphology and relations
- 15- Digestive system VII. Stomach: morphology and relations
- 16- Digestive system VIII. Pancreas and duodenum: morphology and relations
- 17- Digestive system IX. Liver: morphology and relations and bile duct
- 18- Digestive system X. Small intestine: jejunum, and ileum, morphology and relations
- 19- Digestive system XI. Large intestine: colon and rectum: morphology and relations
- 20- Digestive system XII. Spleen, lymphatic and portal venous systems. Morphology and relations
- 21- Nervous system I. General concepts, classification. Cranial cavity and Telencephalon
- 22- Nervous system II. Diencephalon and brainstem (mid brain).
- 23- Nervous system III. Hindbrain
- 24- Nervous system IV. Cranial nerves (pairs): classification and distribution
- 25- Nervous system V. Spinal cord: Anatomical constitution and spinal nerves
- 26- Nervous system VI. Morphological and functional organization of the nervous system: sensory and motor pathways. Taste pathways
- 27- Nervous system VII. Neurovegetative, sympathetic, parasympathetic and enteric nervous systems.
- 28- Endocrine system. Study and morphological and functional organization.
- 29- Surface anatomy. Body patterns and anthropometric concepts
- 30- Body composition: Body fat distribution and sex and age related modifications

Practical work

- P1- Anatomical terminology
- P2- Musculoskeletal system
- P3- Cardiovascular system
- P4- Respiratory system
- P5- Genital and urinary systems
- P6- Digestive system I: Mouth
- P7- Digestive system II: Pharynx, esophagus
- P8- Digestive system III: Stomach, duodenum, and pancreas
- P9- Digestive system IV: liver and bile ducts

- P10- Digestive system V: small and large intestine, rectus and peritoneum
- P11- Nervous system I: Brain
- P12- Nervous system II: Brainstem and spinal cord
- P13- Surface Anatomy. Kinanthropometry and body patterns determination. Somatotype.
- P14- Body fat composition and determination

Seminars and presentations.

- S1- Embryonic development
- S2- Teratology
- S3- Surface anatomy. Health index.
- S4- Student Presentation and group discussion (3 hours)

ASSESSMENT OF LEARNING

Assesment criteria

Attitude in the classroom:

In the event of a voluntary or involuntary violation of the norms for the completion of a particular examination, this will result on the non-assessment of that exam. The student will have the choice to complete an oral examination to determine his or her knowledge of the material covered for that exam. If the infraction was voluntary this will be considered a serious ethical violation. This incident will be reported to the Inspection Services for their evaluation and any disciplinary measures they deem necessary.

Ordinary Examination:

1. The dates for each exam will be posted in the teaching organization booklet of "Grado de Nutrición Humana y Dietética". The Department will publish (with sufficient time) in the bulletin board and in the virtual campus the place and time for each examination.
2. The exam will consist of theoretical and practical portions. These will represent 60% and 30% respectively of the final grade. The reminding 10% will be valued from the continuous evaluation and individual student effort.
3. The theoretical portion will consist of an exam with multiple-choice, short answers and/or image identification. The multiple-choice questions will have 5 choices with one correct answer. There will be no negative points. The maximum score for each exam will be 10 points. A grade of 6 or higher will be needed in order to pass this exam and to be taken in consideration for the final grade.
4. The practical portion will consist on identification of the material seen in practical sessions.
5. A pass grade on the theoretical exam will be needed in order to count the practical (30%) portion for the final grade.
6. The continuous evaluation and individual student effort (10%) will be added to the final grade once a pass grade is achieved in the theoretical AND practical examination.

Extraordinary Examination

There will be a theoretical and practical exam with similar characteristics as the ordinary examination. The theoretical examination will be worth 65% and the practical portion worth 35%. There will be no continuous evaluation for this examination.

Blibiography:

- Carpenter, Neuroanatomía Fundamentos, Ed. Médica Panamericana.
- DTCM, Diccionario terminológico de ciencias médicas, 13a ed.
- Feneis, Heinz; Dauder, Wolfgang, Nomenclatura Anatómica Ilustrada, Editorial Elsevier.
- Kamina, Pierre, Anatomía Humana General, Editorial Médica Panamericana S.A.

- Moore, K., Embriología Básica, Editorial Interamericana-Mcgraw-Hill.
- *Moore y Agur, Compendio de Anatomía con orientación clínica, Editorial Masson S.A.
- Netter, F., Atlas de Anatomía Humana. Editorial Elsevier.
- PROMETHEUS. Texto y Atlas de Anatomía, Editorial Médica Panamericana S.A.
- SOBOTTA. Atlas de Anatomía, Editorial Elsevier.
- GRAY. Anatomía Básica, Editorial Elsevier, 2013.
- Langman, S., Embriología Médica, 4° ed., Editorial Médica Panamericana S.A.
- Lumley, Anatomía de Superficie. Editorial Churchill- Livingstone.
- Mackinnon y Morris, Oxford-Anatomía Funcional, Editorial Médica Panamericana S.A.
- Most of these resources are available in English in the medical school library. A detailed list will be provided the first day of class.