

**COURSE DATA****Data Subject**

<b>Code</b>	34494
<b>Name</b>	Clinical anatomy
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	4.5
<b>Academic year</b>	2021 - 2022

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. year</b>	<b>Period</b>
1204 - Degree in Medicine	Faculty of Medicine and Odontology	2	Second term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1204 - Degree in Medicine	18 - Optional subjects	Optional

**Coordination**

<b>Name</b>	<b>Department</b>
HERNANDEZ GIL DE TEJADA, TOMAS	17 - Human Anatomy and Embryology

**SUMMARY**

The Human Anatomy is one of the foundations by which the education of our Medicine students is built; however, the academic programs, with few hours, cannot cover the important interrelation of the Anatomy with the Clinic. The introduction of the new diagnosis and images techniques have made of the Anatomy an even more exact science and have moved the anatomical discipline to the field of the Clinical Anatomy.

In this discipline, the distance between normal general Anatomy and the clinical implications of the Anatomy, which are very frequent and quite a few, is kept, as well as the anatomical variations arising in the formation of the human body, variations that can produce clinical disorders and which the Medicine student must know and learn without any doubt.



## PREVIOUS KNOWLEDGE

### Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

### Other requirements

It is recommended students approved the subject of Anatomy of 1st grade.

## OUTCOMES

### 1204 - Degree in Medicine

- Students must be able to apply their knowledge to their work or vocation in a professional manner and have acquired the competences required for the preparation and defence of arguments and for problem solving in their field of study.
- Students must have the ability to gather and interpret relevant data (usually in their field of study) to make judgements that take relevant social, scientific or ethical issues into consideration.
- Understand and recognise the structure and normal function of the human body, at the following levels: molecular, tissue, organic, and of systems, in each phase of human life and in both sexes.
- Proper organisation and planning of the workload and timing in professional activities.
- Team-working skills and engaging with other people in the same line of work or different.
- Criticism and self-criticism skills.
- Capacity for communicating with professional circles from other domains.
- Acknowledge diversity and multiculturality.
- Consideration of ethics as a fundamental value in the professional practise.
- Working capacity to function in an international context.

## LEARNING OUTCOMES

Once the subject is finished the student must be able to:

1. Know how to find the injuries with disorders of the anatomical organs; some of the diseases are produced by anatomical injuries, and most of the diseases are produced equally by compressions of the near visceras.
2. Know that the relation of the anatomy with the clinic is so evident that we should know the first one in order to correlate the clinical symptoms with anatomical disorders.



3. Likewise, the anatomical variations, that represent approximately more than the 10-15 %, can produce disorders in our organs and viscera, so we have to know the more frequent known variations and to intervene in the observation, casuistry and research to analyze and look for the non-described variations until now.

4. Create a clinical and analytical conscience to know how to observe and think, in which a clinical disorder can trigger more clinical disorders, which have their origin in an anatomical disorder.

## DESCRIPTION OF CONTENTS

### 1. THEORY

- 1.- Introduction and basic concepts in clinical anatomy.
- 2.- Basic clinical embryology: congenital anatomical anomalies or birth defects.
- 3.- Clinical anatomy of the vertebral column.
- 4.- Clinical anatomy of the lower limb (I): foot and leg.
- 5.- Clinical anatomy of the lower limb (II): thigh and pelvic girdle.
- 6.- Clinical anatomy of the upper limb (I): hand and forearm.
- 7.- Clinical anatomy of the upper limb (II): arm and shoulder girdle.
- 8.- Clinical anatomy of the chest (I): chest walls.
- 9.- Clinical anatomy of the chest (II): thoracic viscera.
- 10.- Clinical anatomy of the abdomen (I): abdominal walls.
- 11.- Clinical anatomy of the abdomen (II): abdominal viscera.
- 12.- Clinical anatomy of the pelvis (I): pelvic walls.
- 13.- Clinical anatomy of the pelvis (II): pelvic viscera.
- 14.- Clinical anatomy of the neck.
- 15.- Clinical anatomy of the head.
- 16.- Clinical anatomy of the sense organs.
- 17.- Clinical anatomy of the cranial nerves.
- 18.- Clinical anatomy of the central nervous system (I): spinal cord
- 19.- Clinical anatomy of the central nervous system (II): brain

### 2. PRACTICES

#### SEMINARS

1. Seminar on clinical embryology.
- 2.- Seminar on clinical anatomy of the spine.
- 3.- Seminar on clinical anatomy of the lower limb.
- 4.- Seminar on clinical anatomy of the upper limb.
- 5.- Seminar on clinical anatomy of the chest.
- 6.- Seminar on clinical anatomy of the abdomen.
- 7.- Seminar on clinical anatomy of the pelvis.
- 8.- Seminar on clinical anatomy of the head and neck.
- 9.- Seminar on clinical anatomy of the sense organs.



- 10.- Seminar on clinical anatomy of the cranial nerves.  
11.- Seminar on clinical anatomy of the central nervous system.

## TUTORIALS

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Seminars	22,00	100
Theory classes	19,00	100
Tutorials	4,00	100
Attendance at events and external activities	7,00	0
Development of individual work	5,00	0
Study and independent work	23,50	0
Readings supplementary material	5,00	0
Preparation of evaluation activities	7,00	0
Preparation of practical classes and problem	10,00	0
Resolution of case studies	5,00	0
Resolution of online questionnaires	5,00	0
<b>TOTAL</b>	<b>112,50</b>	

**TEACHING METHODOLOGY**

**Theoretical classes**, the teacher will expose through masterclass, the concepts and most important content in a structured way, to obtain the knowledge and skills that students should acquire. It will boost the participation of the students. Available teaching material used by the Professor, if it deems appropriate, from the electronic resource Aula Virtual.

Classes classroom practices. **Seminars**: in small groups the professor will pose the subjects in depth, case studies, current affairs. It will enhance teamwork.

**EVALUATION**

**Theoretical evaluation: 60% of the final score.** It will be done through a written test which will be useful to assess knowledge acquisition and which will consist of contents on the theoretical programme. The exam will comprise multiple choice questions, and wrong answers will not penalise.



**Practical evaluation:** 40% of the final score. It will consist of the elaboration of an individual assignment regarding an issue on Anatomy, its application or clinical impact.

Students must obtain 4 out of 10 points in the theoretical assessment.

In order to access to an advance on the call of this subject, it is a requirement that the student has coursed all his/her practices.

Attendance to practical sessions is mandatory. Unjustified non-attendance to more than 20% of the sessions will make it impossible to pass the course.

## REFERENCES

### Basic

- DRAKE R.L.; MITCHELL A.M.W.; VOGL A.W. (2020) Gray. Anatomía para estudiantes. 4ªed. Ed. Elsevier, 1304 páginas.
- MOORE K.L.; DAILEY A.F.; AGUR A.M.R. (2018) Anatomía con orientación clínica. 8ª ed. Ed. Wolters Kluwer, 1.133 páginas.
- SPLITTGERBER R. (2019), Snell. Neuroanatomía clínica. 8ª ed., Ed. Wolters Kluwer, 560 páginas.
- MOORE K.L.; PERSAUD T.V.N.; TORCHIA M.G. (2020) Embriología clínica. 11ª ed. Ed. Elsevier, 520 páginas.

## ADDENDUM COVID-19

**This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council**

Siguiendo las recomendaciones del Ministerio, la Consellería y el Rectorado de nuestra Universidad, para el período de la "nueva normalidad", la organización de la docencia para el segundo cuatrimestre del curso 2021-22, seguirá un modelo híbrido, donde tanto la docencia teórica como práctica se ajustará a los horarios aprobados por la CAT pero siguiendo un modelo de Presencialidad / No presencialidad en la medida en que las circunstancias sanitarias y la normativa lo permitan y teniendo en cuenta el aforo de las aulas y laboratorios docentes. Se procurará la máxima presencialidad posible y la modalidad no presencial se podrá realizar mediante videoconferencia cuando el número de estudiantes supere el coeficiente de ocupación requerido por las medidas sanitarias. De manera rotatoria y equilibrada los estudiantes que no puedan entrar en las aulas por las limitaciones de aforo asistirán a las clases de manera no presencial mediante la transmisión de las mismas de manera síncrona/asíncrona via "on line".