

Syllabus Information

Academic year: 2024/25

Subject: 26735 - Medical and Forensic Bio-anthropology

Faculty / School: 104 - Facultad de Medicina

Degree: 304 - Degree in Medicine

ECTS: 4.0

Year: 5

Semester: **Subject type:** Optional

Module:

1. General information

The aim is to acquire the necessary skills to:

- a. Differentiate human remains from animal remains.
- b. Identify the number of individuals in a set of skeletal remains.
- c. Recognise the basic characteristics for establishing the ethnic pattern, sexual dimorphism, age and size of the remains, as well as the means of determining the identity of the skeletal remains under study.
- d. Recognise and discriminate bone lesions due to external agents, disease or taphonomy.
- e. Establish whether the findings and study of human skeletal remains have legal-penal consequences and know how to act in these cases.
- f. Know the basic concepts and methods of identification in forensic genetics and in the study of ancient DNA, its performance and its usefulness in different cases.
- g. Recognise the ethical, legal and judicial implications of the applications of Molecular Anthropology and Forensic Genetics and, in particular, the participation that the general practitioner may have in this field.

2. Learning results

In order to pass this subject, the student must demonstrate the following results:

- Distinguish key issues of the social and cultural evolution of human beings and their influence on the way they approach illness and health, and face death, as well as the mechanisms of adaptation to the environment and their evolution through time.
- Through the analysis of bone remains and dental pieces of human origin, resolve basic questions in relation to: the characteristics of the individuals to whom these remains belonged (age, sex, size, ethnicity and singular characteristics), the possible natural or violent origin of the death, the establishment of the cause and date of death, etc., and finally the meaning/transcendence of all this information from a legal-criminal perspective.
- Discriminate between the semiology of vital and post-mortem bone lesions and, within the latter, determine the keys to the interpretation of findings potentially resulting from post-mortem taphonomic processes/diagenetic alterations.
- Determine the social, legal and ethical importance of the correct identification of human remains and respect for standardised procedures in this field, without losing sight of the human aspect and the significance of handing over the skeletal remains to the bereaved.
- Identify the fundamentals of the molecular individualisation techniques of Molecular Anthropology and Forensic Genetics, their objectives, possibilities and applications in specific cases, their performance and technical and scientific standards, as well as the procedures for collaborating in the collection, filing, custody and sending of samples for analysis in the laboratory.
- Identify the fundamental collaboration actions in accidents with multiple victims and in events that threaten the fundamental rights of individuals and in which interaction with different groups of professionals and experts in forensic sciences, with relatives, security forces, institutions and the media is necessary.
- Identify fundamental actions of collaboration with the Administration of Justice in certain cases and draw up basic medical-legal reports in Forensic Anthropology, as well as interpreting the meaning and scope of basic reports in Forensic Genetics.

3. Syllabus

Integrate concepts, competences and skills acquired by the student up to the moment of taking the subject with those of Anthropology in its different branches in order to allow the future doctor:

- To better understand and interpret the experience/approach of different individuals to the processes of illness, ageing, loss of physical capacity and death, as well as to health.
- Understand, propose and develop basic procedures for collaboration with the Administration of Justice in the resolution of forensic identification problems.

4. Academic activities

Lectures: 19 hours

Problem solving and case studies: 9 hours

Laboratory practices: 25 hours

Seminars: 4 hours

Teaching assignments. 10 hours

Personal study: 40 hours

Assessment tests. 5 hours

5. Assessment system

The evaluation of each student will consider their capacity for assimilation, analysis and synthesis, assessing the information acquired, the ability to adequately relate different information, the degree of familiarity with the specific terminology of the subject, the ability to solve practical exercises set out during the course, their active participation in specific points of the presentation of the syllabus and the work carried out by the student.

The degree of knowledge and handling of the theoretical contents of the subject will be assessed by means of a written test, and the ability to solve specific cases and problems will be assessed by means of the student's voluntary personal contributions to the development of the subject, together with the resolution of the cases that must be carried out to complete the practical exercises of the subject.

Continuous assessment. ADD:

This includes a set of activities whose function is to represent the learning that the student carries out throughout the course. At the beginning of the course, the student agrees with the teacher to carry out these activities and this agreement is called "Pedagogical Contract". By means of the Portfolio the student can achieve 100% of the final mark, as its completion makes it possible to check that all the learning outcomes have been achieved and to assess the degree of achievement with which the process has been completed.

Final exams in January and June:

- January final exam:

The student must sit the January final exam when the overall assessment of the subject (continuous assessment) does not reach a mark of 50%.

Format of the January final exam: multiple-choice questions with 30 multiple-choice questions, each with five possible answers and only one true answer. No negative points will be counted for wrong answers. A score of 50% is required to pass this exam.

In order to sit the January exam, and to consider the subject passed, it is necessary to have completed the practicals, which are compulsory. If it has not been possible to complete the practicals in the January exam, the student will have the option of taking a practical exam. This exam will consist of a developmental question that involves the resolution of a practical case and the preparation of a medical-legal document. A mark of 50% is required to pass the practical exam.

- June final exam:

Students must sit the final exam in September if they have not passed the final exam in January.

The exam will be a multiple-choice exam with the same characteristics as the January exam (30 multiple-choice questions, each with five possible answers and only one true answer. Negative points will not be counted for wrong answers), although in the September exam the exam also includes a developmental question that involves the resolution of a practical case, which involves the preparation of a medical-legal document.

A mark of 50% is required to pass this exam.

6. Sustainable Development Goals

3 - Good Health & Well-Being

4 - Quality Education