

Academic Year/course: 2022/23

26735 - Medical and Forensic Bio-anthropology

Syllabus Information

Academic Year: 2022/23

Subject: 26735 - Medical and Forensic Bio-anthropology

Faculty / School: 104 - Facultad de Medicina

Degree: 304 - Degree in Medicine

ECTS: 4.0

Year: 5

Semester: First semester

Subject Type: Optional

Module:

1. General information

1.3. Recommendations to take this course

The face-to-face classes will develop classrooms that guarantee the distance given the pandemic and the possibility of teaching in a non-face-to-face or telematic way if necessary is taken into account.

The practices will be carried out in the dissection room, guaranteeing the distance with small groups given the pandemic moment and foresees the realization of alternatives by telematic means.

TUTORIES: They will be arranged by appointment with the teacher via email.

2. Learning goals

3. Assessment (1st and 2nd call)

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, ICTs - information and communication technologies (networks, software, computer, projector, etc.).
- Practice sessions in laboratory and dissection room, (real cases and virtual models).
- All methods will be tailored to the number of students enrolled and current recommendations.

4.2. Learning tasks

The course includes the following learning tasks:

- Task 1: Lectures (fifteen hours taught by the Department of Human Anatomy and Histology and five hours by the Department of Pharmacology, Physiology and Forensic and Forensic Medicine). CREDITS: twenty HOURS.
- Task 2: Laboratory practices. CREDITS: 10 HOURS Dept. Human Anatomy and Histology, two HOURS: FORENSIC GENETICS LABORATORY. Department of Pharmacology, Physiology and Forensic and Forensic Medicine.
- Task 3: Problem solving and cases. CREDITS: eight HOURS in Dept. Human Anatomy and Histology
- Task 4: Carrying out practical work. CREDITS: seventeen HOURS Dept. Human Anatomy and Histology.
- Task 5: Tutorials. CREDITS: Interview individualized and/or in very small groups for the academic and personal orientation of the student.
- Task 6: Exam. CREDITS: two HOURS.
- Task 7: Study. CREDITS: forty-one HOURS.

4.3. Syllabus

The course will address the following topics:

Introduction

CONTENTS

General

Introduction to Human Anthropology. Basic concepts. Human Anthropology. From Physical Anthropology to Molecular Anthropology. Applications in the context of Forensic Sciences.

Physical and forensic anthropology

1. Forensic anthropology. Introduction and basic concepts.
2. Comparative anatomy. Differential diagnosis of animal bone remains and human bone remains.
3. Introduction to Osteology. Structure and function of the skeletal system. Classification and description of the bones.
4. Cranial skeleton. Craniology. Skull anatomy. Epigenetic characters.
5. Craniometry. Points, measurements and indices. Physical anthropology of the postcranial skeleton.
6. Determination of sex. Morphological and morphometric methods.
7. Estimation of the osteological age in adults and subadults.
8. Individual characteristics. Determination of laterality. Reconstruction of height and estimation of weight.
9. Anthropological study of the tooth. Forensic odontostomatology.
10. Palaeopathology. Bone disease. Elements for identification.
11. Collection, transfer and conservation of bone remains. Collection of evidence at the site of the discovery.
12. Human burials Determination of the number of individuals in multiple burials. The cadaveric skeletonization process. Anthropological study on corpses in poor condition.
13. Mass disasters Forensic anthropology in events with multiple victims.

Intervention in events against Human Rights.

14. Dating techniques in bone remains and chemical reconstruction of the diet
15. Medical and forensic anthropology of pandemics.
16. Evolutionary aspects of bioanthropology adaptation to bipedalism, evolution of the brain, evolution of language and evolution of the hand.
17. Anthropology of the living subject. Determination of age in the living subject. Somatometry and body composition.
18. The report in Physical and Forensic Anthropology.

Forensic Genetics and Molecular Anthropology

1. Forensic science at the service of the identification of the living and the corpse. DNA testing in forensic medicine.
2. Molecular anthropology and ancient DNA. Expert report.

4.4. Course planning and calendar

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 Facultad de Medicina web <https://estudios.unizar.es/estudio/ver?id=118>

As of September 28 at 5:00 p.m.
Development of practices for groups: the dates will be communicated according to the distribution of groups depending on the students enrolled.
These conditions will be at 4:00 p.m. Thursdays according to a Physical Anthropology calendar.
At 5:00 pm. for Forensic Genetics.

4.5. Bibliography and recommended resources

<http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=26735>