Universidad Zaragoza

Academic Year/course: 2023/24

29314 - "Head and Neck Morphology; Stomatognathic System Physiology"

Syllabus Information

Academic year: 2023/24
Subject: 29314 - "Head and Neck Morphology; Stomatognathic System Physiology"
Faculty / School: 229 - Facultad de Ciencias de la Salud y del Deporte
Degree: 442 - Degree in Odontology
ECTS: 6.0
Year: 2
Semester: First semester
Subject type: Basic Education
Module:

1. General information

The main objective of this subject is to teach the anatomy of the head and neck and the physiology of the stomatognathic apparatus in a healthy human body.

This subject is key for the future understanding of the pathophysiological processes of the disease in the stomatognathic apparatus and to understand and carry out appropriate therapeutic procedures.

The approaches of the subject are aligned with Sustainable Development Goals 3 (Health and well-being), 4 (Quality education) and 5 (Gender equality), of the 2030 Agenda of the UN.

It is recommended, for the achievement of the competences of the subject, the previous acquisition of the competences of the subjects of General Human Anatomy, Biochemistry and Molecular Biology, Cell Biology and Histology, and General Human Physiology.

2. Learning results

In order to pass this subject, the students shall demonstrate they has acquired the following results:

1. Know and use properly and accurately the anatomical terminology of the human head and neck.

2. -Know the bony elements of the skull and face, the neuromuscular systems of the head and neck and the vascular and nervous elements that support them.

3. -Recognize the topography of the anatomical elements found in the different regions of the head and neck.

4. -Know the anatomical images of the head and neck of the most frequent diagnostic imaging methods

5. -Know the function of the different structures that integrate the stomatognathic apparatus, from the molecular, cellular, tissue, organ and system levels. Be able to integrate them in order to explain the different functions of the aforementioned apparatus.

6. -Apply the concept of homeostasis and understand the dynamic relationship between the activities of the different tissues, organs and systems involved in the stomatognathic apparatus.

7. -Know and be able to explain the different systems of function regulation, their mechanisms of action and the relationship between them.

8. -Apply physiological knowledge to the understanding of alterations in function.

3. Syllabus

Morphology of the head and neck:

Theoretical and practical program:

1. Introduction. Bone structures

2. Anatomy of the temporomandibular joint

3. Head and neck neuromuscular systems

4. Salivary glands and visceral structures of the head and neck

5. Innervation

6. Vascular bundle

7. Dental morphology

Physiology of the stomatognathic apparatus:

Theoretical program:

1. Introduction. The mucosa in the stomatognathic apparatus
2. Saliva and salivation control
3. Mastication and dynamic occlusion
4. Temporomandibular joint
5. Deglutition
6. Speech, phonation and articulation of language
7. Sensory functions: sensitivity in the stomatognathic apparatus
8. Dental eruption
9. Tooth physiology: enamel and dentin-pulp complex
10. Physiology of the periodontium: insertion and protective periodontium
11. Bone physiology and phosphocalcic metabolism
12. Immune system and stomatognathic system

Practical program:

1. Oropharyngeal examination
2. Examination of the cranial nerves
3. Functional voice exploration
4. Exploration of orofacial pain

4. Academic activities

Due to the high theoretical load of this subject, it is necessary a **continuous work and constant effort** by students. Attendance and active participation in classes, teamwork, and tutoring requests are encouraged.

The subject has a load of 6 ECTS, corresponding to **150 hours** distributed as follows:

- Study: 60 hours
- Theoretical classes: 33 hours
- Teaching assignments and other activities (individual and group): 25.5 hours
- Problems and cases: 18 hours
- Laboratory (e.g. anatomical models and pieces and physiology practices): 9 hours
- Assessment tests. 4.5 hours

5. Assessment system

The grade for the subject is divided into: **Morphology of the head and neck (50%) and Physiology of the stomatognathic apparatus (50%)**. It is **necessary to pass both blocks** (with a 5 out of 10) to pass the subject.

Total or partial fraud or plagiarism in any of the evaluation tests will result in the failure of the subject with the minimum grade, in addition to the disciplinary sanctions that the guarantee committee adopts for these cases. For a more detailed knowledge about plagiarism and its consequences please consult the following link: https://biblioteca.unizar.es/propiedad-intelectual/propiedad-intelectual-plagio#Que

Head and neck morphology (50%)

1. -Theoretical part (25%): 20-30 multiple-choice questions (with 4 answer options and 1/3 penalty for failure) and 3-5 open-ended questions.

2. -Evaluation of practical skills (10%)

3. -Academic work (15%): dental morphology notebook (10%) + group work (or defence of the notebook, in the case of final evaluation) (5%)

If more than 2 absences are accumulated, the student fails, or does not present any work on the due date, the final evaluation will be carried out in the official call (theoretical and practical exam, delivery and defence of the notebook)

To pass this block it is essential to pass the theoretical exam, the practical evaluation and the assignments (with a 5 out of 10)

Physiology of the stomatognathic apparatus (50%)

1. -Final exam with theoretical and practical questions (40%): 25 multiple-choice test questions (in which the effect of chance will be subtracted) and 4 open-ended questions. A partial examination may be held.

2. -Evaluation of the practices (5%): it is done by grading the participation and skills achieved. Students who do not achieve a 5 or who have missed more than 2 sessions will take a practice exam together with the final exam.

3. -Evaluation of physiology work (5%)

In order to pass this block it is essential to pass the final exam, the practices and the work.