Universidad Zaragoza

Academic Year/course: 2023/24

29320 - Dental Radiology

Syllabus Information

Academic year: 2023/24
Subject: 29320 - Dental Radiology
Faculty / School: 229 - Facultad de Ciencias de la Salud y del Deporte
Degree: 442 - Degree in Odontology
ECTS: 6.0
Year: 2
Semester: Second semester
Subject type: Compulsory
Module:

1. General information

The subject "Dental Radiology" aims to provide students with adequate training on the diagnostic possibilities of the different imaging techniques in the odontostomatological field, starting from the appropriate knowledge of the physical principles and mechanism of obtaining them, learning to assess their indications, technique of realization and subsequent interpretation. These approaches and objectives are aligned with the Sustainable Development Goals (SDGs) of the United Nations Agenda 2030 (https://www.un.org/sustainabledevelopment/es/), in such a way that the acquisition of the learning results of the subject provides training and competence to contribute to their achievement (Goal 3: Health and wellness).

2. Learning results

1. Knowledge of the mechanisms and principles of imaging in the different radiological modalities (conventional radiology: intraoral, orthopantomography, ultrasound, computed tomography, magnetic resonance imaging), in order to define the indications, advantages, disadvantages and contraindications of each of them.

2. Knowledge of the radiological anatomy of odontostomatological structures, in the different techniques of formation of image, with integration of these anatomical structures in the sphere of head and neck.

3. Knowledge and identification of dental pathology, being able to establish its semiological criteria in the different imaging modalities, establishing a syndromic diagnosis and differential diagnosis.

4. Knowledge of the role of modern imaging techniques (computed tomography and magnetic resonance imaging) in the assessment and diagnosis of odontostomatological pathology.

3. Syllabus

1.- Radiation physics

2.- Physical Basis of X-rays

3.- Radiobiology

4.- Physical Basis of Nuclear Medicine

5.- Physical Basis of Radiotherapy

6.- Radioprotection

7.- Ultrasound

8.- Magnetic Resonance Imaging

9.- Nuclear Medicine

10.- Contrast Media

11.- Bone lesion descriptors

12.- Radiological semiology

13.- Conventional Dental Radiological Techniques

14.- TC Dental.

15.- Radiology in Implantology

16.- Mandibular tumours

4. Academic activities

Interactive teaching, eminently practical, encouraging student participation in the theoretical class.

Practical seminars oriented to the resolution of problems and case studies, carried out in groups.

Theoretical knowledge will enable the student to assess the indications, advantages, disadvantages and contraindications of the

different imaging techniques, as well as the legal framework for their use.

The practical seminars will allow the application of theoretical knowledge for the resolution and interpretation of different practical cases, as well as for the realization of the radiographic explorations necessary in the dental practice.

Compulsory non face-to-face activities: individual work of bibliographic review of a proposed topic and supervised by the teacher.

5. Assessment system

Final written exam, consisting of 30 multiple-choice questions, including technical evaluation, interpretation and resolution of a case study.

The numerical grade will be expressed in accordance with the provisions of art. 5.2 of Royal Decree 1125/2003 of September 5, 2003 (BOE September 18, 2003), which establishes the European credit system and the grading system for official university degrees valid throughout the national territory.

Thus, the grades will be established in the following range: - From 0 to 4.9: Fail (S); 5.0 to 6.9: Pass (A); from 7.0 to 8.9: Notable (N); from 9.0 to 10: Outstanding (SB). The “Honours” may be awarded to students who have obtained a grade equal to or higher than 9.0.