Universidad Zaragoza

Academic Year/course: 2022/23

29320 - Dental Radiology

Syllabus Information

Academic Year: 2022/23
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

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 theory sessions, workshops, problem-solving, visits, and autonomous work and study.

4.2. Learning tasks

This course is organized as follows:

- **Theory sessions**. Interactive teaching, eminently practical, encouraging student participation during the lecture. The theoretical knowledge will enable the student assessment of the indications, advantages, disadvantages, and contraindications of the different imaging formation techniques, as well as the legal framework for its use.
- **Workshops** oriented to problem-solving, case studies, carried out in groups. Radiological cases (X-ray viewer). The workshops will allow to apply theoretical knowledge for the resolution and interpretation of different practical cases as well as performing the radiographic examinations required in dental practice.
- **Visits** to hospitals to display performance of CT, MRI and orthopantomography.
- **Autonomous work and study**.

4.3. Syllabus

This course will address the following topics:

Introduction

- 1 Concept of Diagnostic Imaging. Modalities to obtain diagnostic imaging, historical sketch, development and evolution to the present day. Bases and mechanisms for obtaining an image
- 2 Concepts and general principles: electromagnetic and ionizing radiation.

- 3 Conventional Radiology and tomodensitometry. Physical principles, specific features.
- 4 Ultrasound and MRI. Physical principles, particularities.
- 5 The radiological technique, basic principles: Orthopantomography and intraoral radiography.

Radiation protection

- 7 Integration of the oral cavity and dental structures in the area of ??head and neck I
- 8 Integration the oral cavity and dental structures in the area of ??head and neck II
- 9 Integration of the oral cavity and dental structures in the area of ??head and neck III

Radiological semiology and Radiopathology

- 10 Intraoral radiography and orthopantomography. Basic semiology.
- 11 Intraoral radiography and orthopantomography. Major syndromes.
- 12 Dentascan. Basic principles.
- 13 Dentascan. Semiology and radiopathology.

Temporomandibular joint

- 14 Anatomical particularities. Diagnostic Imaging: conventional Radiology and tomodensitometry.
- 15 MRI. Radiological anatomy and semiological criteria.
- 16 MRI. Major syndromes.

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 Faculty of Health and Sports Sciences website (https://fccsyd.unizar.es/es/odontologia/grado-en-odontologia) and Moodle.

4.5. Bibliography and recommended resources

To consult the bibliography and recommended resources, you must access the *Recommended Bibliography* link.