

## 29347 - Orofacial Pain

### Syllabus Information

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**Academic Year:** 2020/21

**Subject:** 29347 - Orofacial Pain

**Faculty / School:** 229 - Facultad de Ciencias de la Salud y del Deporte

**Degree:** 442 - Degree in Odontology

**ECTS:** 6.0

**Year:** 4

**Semester:** Second semester

**Subject Type:** Optional

**Module:** ---

## 1.General information

### 1.1.Aims of the course

**The subject and its expected results respond to the following approaches and objectives:**

The main objective of the subject is to provide the student with the general basic knowledge on which the treatment of orofacial pain is based. This will help them when they are professionals to diagnose and treat complex cases of orofacial pain, which may present themselves in the daily clinic. Most of the clinical demands that patients request in a dental office are to resolve problems of referred pain in the oral cavity.

### 1.2.Context and importance of this course in the degree

The students in this grade are being trained to become good and competent professionals tomorrow. Dentistry is a science that is included within the medical sciences, and in the daily clinic, professionals in this field must frequently face situations in which pain is present. The resolution of pathologies that cause pain or discomfort to the patient is important for the dentist, who must have a good knowledge of the origin, diagnosis and treatment of orofacial pain, as it will help them achieve professional success.

### 1.3.Recommendations to take this course

It is recommended to have passed the contents related to the following areas of knowledge: Cell Biology, Biochemistry, Human Physiology, Anatomy of the head and neck, Physiology of the Stomatognathic Apparatus and Pharmacology.

## 2.Learning goals

### 2.1.Competences

Upon passing the subject, the student will be more competent to ...

- Know the general processes of getting sick, healing and repairing, including infection, inflammation, bleeding and coagulation, scarring, trauma and disorders of the immune system, degeneration, neoplasia, metabolic disorders and genetic disorders.
- Know oral manifestations in systemic diseases.
- Know the general and clinical pharmacology in dental practice.
- Know the pharmacological bases of the different local and general anesthetic techniques, as well as the role of sedation and general anesthesia in the management of the dental patient.

Additional specific competences of the optional subject:

- Understand and recognize the normal structure and function of the structures involved in the perception of orofacial pain.
- Understand and recognize the effects, mechanisms and manifestations of orofacial pain.
- Understand and recognize the causative agents and factors of orofacial pain.

## 2.2.Learning goals

**The student, to pass this subject, must demonstrate the following results ...**

- Know the physiological and pathophysiological mechanisms involved in orofacial pain.
- Identify the different types of pain and the diagnostic and therapeutic orientation of orofacial pain.
- To know the mechanisms and models of pain of dental or intraoral origin, and its clinical and therapeutic considerations, and to use analgesic drugs in the treatment of pain with efficacy, safety and comfort.
- Apply minimally invasive techniques in the treatment of orofacial pain.
- Assess the experience and the moment in which a patient with orofacial pain should receive specialized treatment.

## 2.3.Importance of learning goals

## 3.Assessment (1st and 2nd call)

### 3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

**The student must demonstrate that they have achieved the expected learning outcomes through the following assessment activities:**

- Theoretical exam\* (60% of the final grade). It can consist of test questions, development questions and case questions.
- Practical "clinical cases" (10% of the final grade)
- Laboratory practices / seminars (10% of the final grade)
- Seminars and / or ABP (Problem Based Learning) (10% of the final grade)
- Group work (10% of the final grade)

\* To pass the course it is essential to pass the theoretical exam (> 5 points)

**Grading system:** The numerical rating will be expressed in accordance with the provisions of art. 5.2 of Royal Decree 1125/2003 of September 5 (BOE September 18), which establishes the European credit system and the system of qualifications for university degrees of an official nature and valid throughout the national territory. Thus, the grades will be established in the following range: From 0 to 4.9: Suspense (S); 5.0 to 6.9: Pass (A); from 7.0 to 8.9: Notable (N); 9.0 to 10: Outstanding (SB). The mention of Honor Registration may be awarded to students who have obtained a grade equal to or greater than 9.0.

Given the exceptional situation for this 2020/21 academic year:

- The assessment task are proposed to be carried out in person.
- In the event that the health authorities, in view of the pandemic that is currently plaguing us, recommend isolation measures, confinement or it would be discouraged to go to classrooms:
  - The final evaluation test of the theoretical contents (60% of the final grade) will be carried out electronically through the Moodle platform through questionnaires that

include multiple-choice questions [ $n = 15$  (each teacher)  $\times$  3 (teachers) = 45 questions). There are no penalties for failed responses. 30 correct questions are required to pass the exam.

- 10% active class attendance and participation (prof 1). Practical cases uploaded to the ADD that the students have to solve individually.
- 10% Assessment continuous assessment ADD (Prof 2): Practical cases uploaded to the ADD that students have to solve individually.
- 10% Assessment continuous assessment ADD (Prof 3): Practical cases uploaded to the ADD that the students have to solve individually.
- 10% of the work commissioned to the students.

## 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, practice sessions, tutorials, and autonomous work and study.

The learning process designed for this course follows an orderly step-wise process, so that the course starts with the study of basic and integration concepts which are mainly worked in **lectures**, then it introduces the student to develop skills involving procedural, integration and understanding skills of the applications of the course to be worked through various activities in small groups in **practice sessions**.

To better track the learning process, students will be encouraged to use the **tutorials** through various systems and methods: conventional tutoring or more specific assistance related to practical work.

### 4.2.Learning tasks

This course is organized as follows:

- **Lectures** (4 ECTS: 40 hours). basic concepts of the course are dealt with, directing students towards the acquisition of skills and learning outcomes. Audiovisual support material will be used and students could find it in Moodle. During these activities, students will be encouraged to be participatory and dynamic.
- **Practice sessions** (2 ECTS: 20 hours) Six two-hour sessions.
  - Seminars
  - Clinical Cases
  - Clinical Practice
- **Tutorials**. both individual and in groups.
- **Autonomous work and study**: From all other activities, students should be responsible for creating diagrams and structured work programs.

Given the exceptional situation for this 2020/21 academic year, the way of carrying out the different learning activities is subject to the availability of physical spaces in the Center. The following scenarios are contemplated:

1.- Online format through technologies that allow interaction (Google Meet type) in the following learning activities:

- Type 1 teaching to be done in a full group (theory classes)
- Type 2 teaching to be done in a full group (problem solving and cases)

2. Face-to-face format in the following learning activities:

- Type 2 teaching with breakdowns in groups (problem solving and cases) of all the courses of all the degrees taught at the Center.
- The practical teaching to be carried out in laboratories, sports facilities and SPO of all the courses of all the degrees taught at the Center.

### 4.3.Syllabus

This course will address the following topics:

## Lecture topics

- 1. The Neural Anatomy of Orofacial Pain
- 2. The Neurophysiology of Orofacial Pain: Nociceptors
- 3. The Central Processing of Orofacial Pain: Pain processing in brainstem.
- 4. The Central Processing of Orofacial Pain: Pain processing at the Supraspinal Level.
- 5. Physiopathology of inflammation and its relation to nociception
- 6. Neurogenic inflammation
- 7. Pharmacological and non-pharmacological treatment in orofacial pain.
- 8. The Various Clinical Presentations of Pain
- 9. Principles of Pain Diagnosis
- 10. Background: Orofacial pain in dental practice.
- 11. Category Classification of Oral and Facial Pain.
- 12. Cutaneous, Mucogingival and dental Pains.
- 13. Musculoskeletal Pains. Introduction to Temporomandibular Disorders.
- 14. The Etiopathology of temporomandibular disorders.
- 15. The interdisciplinary treatment of temporomandibular disorders.
- 16. Visceral Pains
- 17. Vascular and Neurovascular Pains.
- 18. Neuropathic Pains

## 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 and Moodle.

## 4.5.Bibliography and recommended resources

- Okeson, Jeffrey P.. Dolor orofacial según Bell : tratamiento clínico del dolor orofacial / Jeffrey P. Okeson . 6a ed Barcelona [etc.] : Quintessence, 2008 (BB)
- Orofacial pain : guidelines for assessment, diagnosis, and management / Reny de Leeuw, editor. . 4th ed. Chicago : Quintessence, 2008. (BB)
- Bascones Martínez, Antonio. Dolor orofacial : diagnóstico y tratamiento / Antonio Bascones Martínez, Francisco J. Manso Platero. . - 1a ed. Madrid : Avances médico-dentales, 1997. (BC)
- Norton, Neil S.. Netter, Anatomía de cabeza y cuello para odontólogos/ Neil S. Norton ; ilustraciones de Frank H. Netter ; ilustradores, Kip Carter ... [et al.]. Ámsterdam ; Barcelona [etc.] : Elsevier Masson, 2007. (BC)
- *Orofacial pain : from basic science to clinical management : the transfer of knowledge in pain research to education / edited by James P. Lund ... [et al.] Chicago : Quintessence, 2001 (BB)*
- García-Fajardo Palacios, Carlos. Dolor odonto estomatológico / Carlos García-Fajardo Palacios [Madrid : Riapano, 2007] (BC)