COURSE DATA

Data Subject	
Code	36249
Name	Practicum I in Paediatric Patients
Cycle	Grade
ECTS Credits	10.0
Academic year	2022 - 2023

Study (s)

Degree	Center	Acad. year	Period
1206 - Degree in Dentistry	Faculty of Medicine and Odontology	5	Annual

Subject-matter

Degree	Subject-matter	Character
1206 - Degree in Dentistry	42 - Prácticas clínicas tuteladas	External Practice

Coordination

Name	Department
GARCIA SANZ, VERONICA	131 - Stomatology
PAREDES GALLARDO, VANESSA MARIA DE	131 - Stomatology

SUMMARY

The subject Child Patient Practicum forms part of the fifth-year curriculum in the Degree in Dental Medicine.

The student puts into practice all the knowledge acquired during the degree in an integrated, sequential and ordered manner, to:

- Conduct a full dental examination of the child patient.
- Diagnose, plan, make decisions and generally perform multidisciplinary, comprehensive, sequential and integrated treatment on a child patient, including clinical dental techniques and procedure aimed at prevention and restoration of the child patient under the teacher’s supervision.

It includes no theoretical content given that this has been covered over the four preceding years of the degree. Clinical seminars will be conducted based on clinic cases. These will be entirely practical.

Students are reminded of the great importance of carrying out evaluation surveys of all the teaching teachers of this subject.

PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

1206 - Degree in Dentistry :

1210 - Grado de Odontología 2012 :

R4-OBLIGATION TO HAVE SUCCESSFULLY COMPLETED THE COURSE

34720 - Orthodontics I

34722 - Odontopediatrics

34720 - Orthodontics I

34722 - Odontopediatrics

Other requirements

OUTCOMES

1206 - Degree in Dentistry

- Be able to identify the patient's concerns and expectations, and to communicate effectively and clearly, both orally and in writing, with patients, their relatives, the media and other professionals.
- Know how to share information with other health professionals and how to work in a team.
- Be able to prepare an initial diagnosis and establish a reasoned diagnostic strategy, and to recognise situations requiring urgent odontological attention.
- Know and be able to apply basic treatments for the most common dental pathologies in patients of all ages. Therapeutic procedures must be based on minimally invasive techniques and on a global and integrated approach to oral healthcare.
- Know how to plan and carry out multi-disciplinary, sequential and integrated odontological treatments of limited complexity in patients of all ages and in all conditions, and in patients requiring special care.
- Formulate and recommend appropriate preventive measures for each clinical situation.
- Acquire clinical experience under appropriate supervision.
- Module: Introduction to Dentistry - Take dental radiographs, interpret the images obtained and be familiar with other relevant diagnostic imaging techniques.
- Module: Introduction to Dentistry - Identify the main reason for consultation and the history of the current disease. Compile a general medical history of the patient and a medical record that accurately reflects the patient's records.

- Module: Dental Pathology and Therapeutics - Make diagnostic casts, mount them and take interocclusal records.
- Module: Dental Pathology and Therapeutics - Prescribe drugs appropriately, knowing their contraindications, interactions, systemic effects and effects on other organs.
- Module: Dental Pathology and Therapeutics - Apply loco-regional anaesthesia techniques.
- Module: Dental Pathology and Therapeutics - Prepare and isolate the operating field.
- Module: Dental Pathology and Therapeutics - Manage acute infections, including prescription and simple surgical aspects.
- Module: Dental Pathology and Therapeutics - Treat dental-alveolar trauma in temporary and permanent teeth.
- Module: Dental Pathology and Therapeutics - Assess and treat the patient with caries or other non-carious dental pathology and be able to use all materials aimed at restoring the shape, function and aesthetics of teeth in patients of all ages.
- Module: Dental Pathology and Therapeutics - Carry out the oral-dental treatment of child patients and recognise their characteristics and peculiarities.
- Module: Dental Pathology and Therapeutics - Identify and correct oral habits that may cause or exacerbate malocclusions.

LEARNING OUTCOMES

Conduct pre-professional practice, in the form of rotating dental clinics, with a final evaluation of the competencies listed above, enabling the assimilation of professional values, face-to-face communication competencies, clinical reasoning, clinical management and critical judgement.

Perform such practice as one of the student’s clinical tasks, conducted on child patients, in an integrated manner, under appropriate supervision by the teacher.

DESCRIPTION OF CONTENTS

1. TOPIC UNIT 1- DIAGNOSIS IN THE PAEDIATRIC DENTAL CLINIC.

TOPIC 1: Diagnosis in Paediatric Dentistry. The first visit.
TOPIC 2: Diagnostic imaging techniques in Paediatric Dentistry.
TOPIC 3: Handling a childs behaviour.

2. TOPIC UNIT 2- DEALING WITH A CHILDS PAIN.

TOPIC 4: Local anaesthetic. Indications. Anaesthetic techniques. Handling the child when administering anaesthetic. Complications.
TOPIC 5: Sedating and pre-medicating child patients. Concept and objectives. Pharmacology. Sedation using nitrous oxide. General anaesthetic.

3. TOPIC UNIT 3- PHARMACOLOGY IN CHILDREN AND HANDLING A CHILD UNDERGOING MEDICATION.

TOPIC 6: Pharmacology. Medical prescription. Practical guide to the use of antibiotics and analgesics in paediatric dentistry.
TOPIC 7: Handling a child undergoing medication. Part One. Alterations to the haemostasis. Leukemia. Diabetes.
TOPIC 8: Handling a child undergoing medication. Part Two. Viral hepatitis. HIV. Prophylaxis of bacterial endocarditis. Asthma. Coeliac disease.

4. TOPIC UNIT 4- STERILISATION IN THE PAEDIATRIC CLINIC.

TOPIC 9: Sterilisation and asepsis in the operating field. Controlling contamination; isolation and disinfection of caries.
TOPIC 10: Sterilisation and asepsis of instruments and material in the clinic. Protocol for action against accidental needle pricks.

5. TOPIC UNIT 5- RESTORATIVE DENTISTRY IN THE PAEDIATRIC CLINIC.

TOPIC 11: Prevention in paediatric dentistry. Risk of caries. Fluoride. Chlorhexidine. Xylitol. Sealing caries and cracks.
TOPIC 12: Restorative dentistry in deciduous teeth. Types of material used. Indications. Clinical cases.
TOPIC 13: Preformed crowns in paediatric dentistry. Concept, objectives and types. Clinical handling of deciduous and permanent teeth. Clinical cases.
TOPIC 14: Early appearance of caries. Concept, etiology, prevention and clinical handling.
TOPIC 15: Pulp therapy for deciduous teeth. Diagnosis of pulpal pathology. Techniques and materials employed. Presentation of cases.
TOPIC 16: Pulp therapy for young permanent teeth. Diagnosis. Techniques and materials employed. Clinical cases.

6. TOPIC UNIT 6- DENTOFACIAL TRAUMA IN CHILDREN.

TOPIC 17: Trauma in deciduous teeth. Types of fracture and recommended treatment. Consequences in permanent teeth.
TOPIC 18: Trauma in permanent teeth. Types of fracture and recommended treatment. Complications.

7. TOPIC UNIT 7- MEDICAL AND SURGICAL PATHOLOGY IN CHILDREN.

TOPIC 19: Oral pathology in paediatric dentistry. Ulcers. Bacterial and viral infections of the oral tissue. Oral mycosis.
TOPIC 20: Teeth anomalies. Part One: alterations in number, shape and colour.
TOPIC 21: Teeth anomalies. Part Two: alterations in hereditary and non-hereditary structures.
TOPIC 22: Orofacial manifestations of significant syndromes. Down Syndrome. Pierre-Robin Syndrome. Ectodermal Dysplasia. Clinical cases.

TOPIC 23: Most common cystic and tumour pathology in children. Clinical cases.
TOPIC 24: Periodontal disease in child patients. Gingivitis and juvenile periodontitis.
TOPIC 25: Surgical treatment in paediatric dentistry. Extracting deciduous teeth. Techniques and necessary material. Complicated extractions: anchylosis, supernumeraries.

8. TOPIC UNIT 8- INTERCEPTIVE DENTISTRY IN THE PAEDIATRIC CLINIC.

TOPIC 26: Diagnosis in dentistry. Part One: Analysing models. Analysis of the sagittal, vertical and transverse planes. Occlusal analysis. Bolton index.
TOPIC 27: Diagnosis in dentistry. Part Two: Interpreting orthopantomograms.
TOPIC 28: Diagnosis in dentistry. Part Three: Cephalometric diagnosis. Cephalometric methodology of Steiner and Ricketts.
TOPIC 29: Diagnosis and interceptive treatment of anomalous oral habits in children. Anomalous deglutition. Buccal respiration. Thumb and dummy sucking. Labial interposition.
TOPIC 30: Handling space. Recommendations, techniques and types of braces.
TOPIC 31: Diagnosis and interceptive treatment of transverse malocclusions. Dentoalveolar expansion. Disjunction.
TOPIC 32: Diagnosis and interceptive treatment of vertical malocclusions. Open bite. Overbite.
TOPIC 33: Diagnosis and interceptive treatment of Class II anteroposterior malocclusions. Functional braces.
TOPIC 34: Diagnosis and interceptive treatment of Class III anteroposterior malocclusions. Orthopaedic braces.
TOPIC 35: Interceptive orthodontic treatment of deciduous teeth. Type of braces
TOPIC 36: Retention and relapse in orthodontic treatment.
TOPIC 37: How to present a clinical case in orthodontics.

WORKLOAD

ACTIVITY	Hours	% To be attended
Odontology practices	200,00	100
Development of group work	10,00	0
Development of individual work	5,00	0
Study and independent work	10,00	0
Readings supplementary material	10,00	0
Preparation of practical classes and problem	10,00	0
Resolution of case studies	5,00	0
TOTAL	**250,00**	

TEACHING METHODOLOGY

In each clinical practice session, the student will be assigned a child patient. They will work first as an operator, assisted by their box companion and later the two students in the box will switch their roles of operator and assistant. The clinical practice sessions will be carried out in the General Clinic of the Dental Clinic at the University of Valencia throughout the morning and afternoon. The student must create a clinical history of the patient in which they must make a diagnosis and a proposed treatment plan. This must be supervised, signed and approved by their clinical practice teacher. Once approved by the teacher, they must enter the treatment into the Dental Clinic's computer programme. Likewise, all steps in the treatment must undergo the teacher's supervision. The clinical practice sessions will be evaluated following evaluation criteria explained below.

Furthermore, the clinical cases presentations are aimed at developing all aspects of practical training concerned with acquiring the manual skill, clinical experience, proposed different therapeutic alternatives, ergonomic and clinical considerations suitable to this age group. These clinical cases presentations are delivered orally with computer support by students and supervised by the corresponding teachers. Likewise, the clinical cases presentations will be evaluated following evaluation criteria explained below.

EVALUATION

Evaluation of the subject consists of several parts as described below:

Weekly Clinical Practice and clinical case presentations 50%

Ongoing evaluation by the clinical practice teacher of the student's attitude and aptitudes, as well as the skills developed by the student both in diagnosis and in treatment during the practice sessions in the academic year. The teacher will record the treatments given by the student on their practice file, grading them and informing the student of unsuitable attitudes and skills.

For this, the teacher will use the evaluation criteria posted in "virtual aula" in Annexes 1A, 1B and 1C.

Clinical practice evaluation also includes clinic case presentations, which are mandatory. The clinical cases will be graded according to their content, as well as each student's presentation. For this, the teacher will use the evaluation criteria posted in "virtual aula" in Annex 2. The teacher will also evaluate student attitude in the rest of the classmate's clinical case presentations.

Attendance at practice sessions and clinical cases presentations is mandatory. Only excused absences will be accepted, an unexcused absence shall mean failure in these and the student will not be entitled to sit the final exam.

The student must obtain a minimum grade of a 5 (approved) on the clinical practice grade to average with the final exam grade.

Final Oral Exam (June) 50%

Test exam and short question exam on pictures of clinical cases, as well as writing a prescription in child patients. Points will be subtracted for incorrect answers in the evaluation.

The final grade will be the average between the test exam and short question exam on pictures of clinical cases, both parties having to be approved with a minimum rating than 5. Should either party terminate this examination, may recover in the July session.

The student must obtain a minimum grade of a 5 (approved) on the final exam to average with the clinical practice grade.

The current evaluation criteria of the University of Valencia is governed by Royal Spanish Decree 1125/2003, dated 5 September 2003, and is as follows:

0-4.9. Fail (F), 5.0-6.9.Pass (P), 7.0-8.9.Above average (AA), 9.0-10. Excellent (E)

The mention “1st Class Honours”, if applicable, shall be granted to students who have obtained a grade equal to or greater than 9.0, according to the criteria for excellence in that distinction, which are established in the final evaluation. The number of such grades may not exceed 5% of the students enrolled in the subject in the corresponding academic year.

In order to access to an advance on the call of this subject, it is a requirement that the student has coursed all his/her practices.

REFERENCES

Basic

- Ortodoncia clínica y terapéutica. Canut Brusola JA. Ed. Masson.
- Odontopediatría: la evolución del niños al adulto joven. Boj JR, Catalá M, García-Ballesta C, Mendoza A, Planells P. Ed. Ripano.
- Odontología Pediátrica. Pinkharm. McGraw, Hill. Ed. Interamericana.

Additional

- Ortodoncia; Teoría y práctica. Proffit WR. Ed. Mosby/Doyma.
- Pediatric Dentistry. A clinical aproach. Koch G, Poulsen S. Ed. Munksgaard.
- Manual de Ortodoncia. Bravo González LA. Ed. Síntesis.