

**COURSE DATA****Data Subject**

<b>Code</b>	34709
<b>Name</b>	General medical pathology and paediatrics
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	9.0
<b>Academic year</b>	2018 - 2019

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. year</b>	<b>Period</b>
1206 - Degree in Dentistry	Faculty of Medicine and Odontology	2	Annual

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1206 - Degree in Dentistry	12 - General medical pathology and paediatrics	Obligatory

**Coordination**

<b>Name</b>	<b>Department</b>
COLOMER REVUELTA, JULIA	290 - Pediatrics, Obstetrics and Gynaecology
MARTINEZ GARCIA, FERNANDO	260 - Medicine

**SUMMARY****CLINICAL MEDICINE:**

The main objective of Clinical Medicine is to provide a basic knowledge about how medical conditions can influence health and dental care. The subject is given a general overview of the causes, mechanisms, manifestations and general management of diseases, especially those that are more closely related to the practice of dentistry and oral health.

The students do not have to know in detail all the issues of Clinical Medicine, but rather to be able to identify the most relevant and common diseases, their complications and their relationship with dentistry.



## **PAEDIATRICS:**

The scheduled program, limited by the number of teaching hours assigned to it within the degree, includes a selection of general and basic paediatric topics, which all healthcare professionals should know. The program also covers more specific aspects of common diseases affecting the paediatric population and treated by the dentist, in particular those aspects, which require special attention.

## **PREVIOUS KNOWLEDGE**

### **Relationship to other subjects of the same degree**

There are no specified enrollment restrictions with other subjects of the curriculum.

### **Other requirements**

## **OUTCOMES**

### **1206 - Degree in Dentistry**

- Promover el aprendizaje de manera autónoma de nuevos conocimientos y técnicas, así como la motivación por la calidad.
- Conocer de los procesos generales de la enfermedad, entre los que se incluyen la infección, la inflamación, las alteraciones del sistema inmune, la degeneración, la neoplasia, las alteraciones metabólicas y los desórdenes genéticos.
- Estar familiarizado con las características patológicas generales de las enfermedades y trastornos que afectan a los sistemas orgánicos, específicamente aquellas que tienen repercusión bucal.
- Conocer, valorar críticamente y saber utilizar las fuentes de información clínica y biomédica para obtener, organizar, interpretar y comunicar la información científica y sanitaria.
- Conocer del método científico y tener capacidad crítica para valorar los conocimientos establecidos y la información novedosa. Ser capaz de formular hipótesis, recolectar y valorar de forma crítica la información para la resolución de problemas, siguiendo el método científico.
- Obtain and elaborate a clinical history with relevant information.
- Identificar el principal motivo de consulta y la historia de la enfermedad actual. Realizar una historia clínica general del paciente y una ficha clínica que refleje fielmente los registros del paciente.
- Identificar los signos y actitudes que sugieran la posible existencia de malos tratos.
- Conocer los procesos generales de enfermar, curar y reparar, entre los que se incluyen la infección, la inflamación, la hemorragia y la coagulación, la cicatrización, los traumatismos y las alteraciones del sistema inmune, la degeneración, la neoplasia, las alteraciones metabólicas y los desórdenes genéticos.



- Conocer las características patológicas generales de las enfermedades y trastornos que afectan a los sistemas orgánicos.
- Conocer las manifestaciones orales de las enfermedades sistémicas.
- Conocer la farmacología general y clínica en la práctica odontológica.
- Conocer y manejar las emergencias y urgencias médicas más frecuentes en la práctica odontológica y en las técnicas de reanimación cardiorrespiratoria básica.
- Tener conocimientos apropiados de nutrición humana, en particular, la relación de los hábitos nutricionales y de la dieta con el mantenimiento de la salud y la prevención de las enfermedades buco-dentales.
- Conocer los procedimientos y pruebas diagnósticas clínicas y de laboratorio, conocer su fiabilidad y validez diagnóstica y ser competente en la interpretación de sus resultados.

## LEARNING OUTCOMES

### CLINICAL MEDICINE:

The student should be able to identify certain diseases based on the patient's medical history, the physical examination and the laboratory tests. Those medical problems, which can affect dental health, must be registered accordingly. The student should be able to orientate the diagnosis and suggest a treatment for each problem. This subject will enable the students to communicate properly with other health care professionals, get appropriate medical information from books, journals or electronic resources, and to correctly use the medical language. In the end, they will be able to seek relevant information from diverse medical databases and to know how to make a critical reading of medical research articles.

The student will learn that different medical problems can influence dental health and that dental health problems can also affect the overall health of the individual. During the practical lessons, the complex relationship between patients and doctors and the attitude of the patients to the healthcare will be explored.

Among the medical conditions that the students should know at the end of the course, because their relevance in dentistry, are: ischemic heart disease, stroke, aspiration pneumonia, diabetes mellitus, metabolic syndrome, chronic renal disease, osteoporosis, Alzheimer's disease, pancreatic or oral cavity cancer, among others.

In summary, the future dentist should be able to recognize patients at risk of developing medical complications, to determine the severity of those risks and when it would be necessary to get help or advice from another colleague with specific knowledge of the subject in question.

The management of patients with multiple diseases should take into consideration the severity of each condition, the type of procedure to be performed, and in particular the associated trauma or distress and the duration of the procedure.



## **PAEDIATRICS:**

At the end of the subject, students are expected to be able to adequately perform dental care to paediatric patients with their specific needs. They also should act as agents within the health system in the prevention, promotion and protection of children's health.

## **DESCRIPTION OF CONTENTS**

### **1. THEORY. CLINICAL MEDICINE**

1. General health and disease. General concepts and main elements of Clinical Medicine.
2. Immunological mechanisms and disease: hypersensitivity reactions, autoimmunity and immunodeficiency.
3. Clinical manifestations of the disease. Pain. Fever. Inflammation.
4. Diseases induced by microorganisms. Toxics. Tumours.
5. Genetic disorders. Clinical manifestations of hypoxia.
6. Systemic inflammatory response syndromes. Concepts of bacteraemia, sepsis and septic shock.
7. Arteriosclerosis. Hypertension. Thrombosis.
8. Ischemic heart disease. Heart failure.
9. Valvular heart disease. Infective endocarditis.
10. Cardiomyopathy. Pericardial diseases. Arrhythmias. Vascular pathology.
11. Hypothalamic-pituitary- peripheral gland axis.
12. Thyroid diseases.
13. Adrenal pathology. Parathyroid disease.
14. Diabetes mellitus. Complications.
15. Oesophageal diseases. Gastro duodenal diseases.

### **2. THEORY. CLINICAL MEDICINE**

16. Diseases of small and large bowel.
17. Diseases of the liver and biliary tract.
18. Liver failure. Pancreatic diseases.
19. Renal disease. Acute and chronic renal failure. Glomerulopathies.
20. Tubular and tubule-interstitial injuries. Diseases of the urinary tract.
21. Respiratory failure. Consolidation, atelectasis and cavitation syndromes. Airway obstructions
22. Interstitial lung disease. Airway obstruction syndromes.
23. Pleural pathology. Mediastinal diseases.
24. Diseases of the peripheral nervous system and cranial nerves. Meningeal disease. Cortex pathology.
25. Headaches and orofacial pain. Neuralgia.
26. Strokes. Subarachnoid haemorrhage.
27. Haemorrhagic diathesis.
28. Anaemia.
29. Haematological malignancies. Myeloproliferative syndromes. Monoclonal gammopathies.



30. Main oropharyngeal cavity infections.

### **3. SEMINARS. CLINICAL MEDICINE**

Seminar 1: Main symptoms and signs. Main complementary explorations.

Seminar 2: Fever and pain treatments.

Seminar 3: Diseases related with the environment (cold, heat, ionizing radiation, air pressure, contaminants, etc.).

Seminar 4: Management of main medical emergencies.

Seminar 5: How to perform a medical search. Use of relevant electronic resources.

Seminar 6: Consciousness disturbances. Coma.

Seminar 7: Pharmacology: Management of commonly used drugs. Side effects. Drug interactions.

Seminar 8: HIV and Acquired ImmunoDeficiency Syndrome (AIDS).

Seminar 9: Rheumatologic and mucocutaneous diseases.

Seminar 10: Clinical cases in Clinical Medicine.

### **4. LAB EXERCISES. CLINICAL MEDICINE**

The lab activities consist mainly in the resolution of clinical cases, for which video and electronic resources will be used.

### **5. THEORY. PAEDIATRICS**

1. General characteristics of childhood and peculiarities of their assistance.
2. Growth and development.
3. Prenatal and neonatal disorders.
4. Nutrition and Metabolism.
5. Digestive and nutritional disorders.
6. Infectious Diseases.
7. Disorders that affects the development of the nervous and muscular system.
8. Haematological disorders.
9. Tumour diseases.
10. Cardiac and renal diseases.
11. Respiratory and otorhinolaryngologic diseases.
12. Endocrine and metabolic disorders.
13. Disease prevention and health promotion.
14. Paediatric pharmacology.
15. Emergencies.



**6. SEMINARS. PAEDIATRICS**

- I. Organization and operation.
- II. Searching for information sources.
- III. General exploration and anamnesis.
- IV. Child psychology.
- V. Emergencies and CPR.
- VI. Case studies.
- VII. Case studies.

**7. LABORATORY EXERCISES. PAEDIATRICS**

The lab activities involve mainly the resolution of clinical scenarios adapted to the dentistry profile.

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Theory classes	50,00	100
Classroom practices	25,00	100
Laboratory practices	15,00	100
Development of group work	20,00	0
Study and independent work	70,00	0
Readings supplementary material	10,00	0
Preparation of practical classes and problem	35,00	0
<b>TOTAL</b>	<b>225,00</b>	

**TEACHING METHODOLOGY**

ECTS assigned to the training activities of this material is distributed according to criteria to allocate 40% of hours to classroom activity and 60% of non-contact hour activities.

Classroom activity time will be distributed in 45% of the hours devoted to lectures, using expository method / master class, 40.5% of the hours devoted to practical teaching (seminars, case resolution, clinical practice) and tutorials and 4.5% of the hours dedicated to the final exam.

The classroom exercises include seminars in groups of about 30-35 students and laboratory practices in groups of about 15 students. The classroom exercises are aimed to strengthen and expand the relevant knowledge of the subject, promote self-learning and for solving problems and doubts. The lab exercises consist mainly in the resolution of clinical cases, for which video and electronic resources will be used.



The non-contact activities will be devoted to study, preparation of seminars and cases as well as the development of assignments that the students will be asked to develop, clarifying and looking more in-depth at the subject matter.

## EVALUATION

There will be two independent evaluations, one for Clinical Medicine and the other for Paediatrics. A minimum grade is required in each part in order to pass the subject.

For the case of those students who pass only one of the parts, the marks obtained in that part will be kept indefinitely.

The final mark is calculated as the weighted average of those marks obtained in each of the materials, provided they reached the minimum required in each. Seventy per cent of the final mark is for Clinical Medicine and 30 % is related to the marks obtained in Paediatrics.

Learning assessment will be conducted according to the following criteria:

- Presentations, individually or in groups, on specific topics involved in the subject (20% of the overall assessment).
- Final written exam, multiple-choice exam to evaluate the knowledge of the subject (70% of the overall assessment).

In order to sit the test, students are required to have completed the previous activities, outlined in the previous paragraph. The written exam contains 70 multiple choice questions for Clinical Medicine and 30 for Paediatrics with five answers being only one correct. For each incorrect answer, 0.25 points will be subtracted from the final punctuation.

- Attendance, attitude and degree of participation in class activities, practice and the proper use of new information technologies (10% of the overall evaluation)

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

- Kliegman RM, Behrman RE, Jenson HB, Stanton BF, eds. Nelson Textbook of Pediatrics. 19th ed. Philadelphia, PA: Elsevier Saunders; 2011.
- Lissauer T, Clayden G. Texto Ilustrado de Pediatría. 3ª Edición. Barcelona, ElsevierMosby. 2009.



- Laso FJ. Patología General. Introducción a la medicina clínica. 2ª Edición. Barcelona, Masson 2010.
- Pérez Arellano JL. Sisinio de Castro: Manual de Patología General. 6ª edición. Barcelona, Masson S.A. 2006.

#### **Additional**

- Scully, C. Medical problems in dentistry. Churchill Livingstone. 2010.
- Farreras/Rozman: Medicina Interna. 16ª edición. Barcelona, Elsevier. España. S.L. 2009.
- Fauci AS, Braunwald E, Kasper DL y cols. Harrison's principles of Internal Medicine. 17ª edición. Nueva York, McGraw Hill 2008.
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