



### **Oral and Maxillofacial Surgical Diseases**

Code: 103602 ECTS Credits: 3

Degree	Туре	Year	Semester
2502442 Medicine	ОТ	5	0
2502442 Medicine	ОТ	6	0

#### Contact

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#### **Teachers**

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#### **Use of Languages**

Principal working language: catalan (cat)

Some groups entirely in English: No Some groups entirely in Catalan: Yes Some groups entirely in Spanish: No

# **Prerequisites**

It is advisable that the student has achieved an advanced knowledge of head and neck anatomy and basic skills in medicine (general pathology), as well as sufficient training on the basis of the disease, pathology, diagnostic imaging, microbiology, treatment of the surgical patient and treatment of the traumatic patient.

### **Objectives and Contextualisation**

This subject will be taught at the UDH Vall d'Hebron, responsible Dr. Juan Antonio Hueto Madrid (jahueto@vhebron.net); Dra. Coro Bescós Atín (cbescos@vhebron.net); Dr. Jorge Pamias Romero (jpamias@vhebron.net); UD Germans Trias i Pujol, responsible Dr. Antonio Vázquez Rodríguez (a29516avr@wanadoo.es) and Dr. Oscar Escuder de la Torre (secmaxilofacial@tauli.cat)

Its general objective is to make known:

- The basic knowledge of dentistry for the doctor
- The foundations of Oral and Maxillofacial Surgery, as well as their interactions with other specialties surgical and dentistry.
- The diagnosis and treatment of the pathologies of the organs and tissues of the face and neck both of acquired and congenital origin.
- Head and neck surgery, oral surgery, surgery of the salivary glands, cancer of the oral cavity and oropharynx, congenital and acquired deformities of the skull and dento-face, trauma to the face, temporomandibular joint and of facial cosmetic surgery.

# Competences

Medicine

- Be able to work in an international context.
- Communicate clearly and effectively, orally and in writing, with patients, family-members and accompanying persons, to facilitate decision-making, informed consent and compliance with instructions.
- Convey knowledge and techniques to professionals working in other fields.
- Critically assess and use clinical and biomedical information sources to obtain, organise, interpret and present information on science and health.
- Demonstrate an understanding of the fundamentals of action, indications, efficacy and benefit-risk ratio
  of therapeutic interventions based on the available scientific evidence.
- Demonstrate basic research skills.
- Demonstrate sufficient supervised clinical experience in hospitals or other healthcare centres, and familiarity with patient-centred care management and the correct use of tests, medicines and other resources of the healthcare system.
- Demonstrate understanding of the causal agents and the risk factors that determine states of health and the progression of illnesses.
- Demonstrate understanding of the importance and the limitations of scientific thought to the study, prevention and management of diseases.
- Demonstrate understanding of the manifestations of the illness in the structure and function of the human body.
- Demonstrate, in professional activity, a perspective that is critical, creative and research-oriented.
- Design and manage programmes and projects in the field of health.
- Engage in professional practice with respect for patients' autonomy, beliefs and culture, and for other healthcare professionals, showing an aptitude for teamwork.
- Establish a diagnostic approach and a well thought-out strategy for action, taking account of the results
  of the anamnesis and the physical examination, and the results of the appropriate complementary tests
  carried out subsequently.
- Establish the diagnosis, prognosis and treatment, basing decisions on the best possible evidence and a
  multidisciplinary approach focusing on the patient's needs and involving all members of the healthcare
  team, as well as the family and social environment.
- Formulate hypotheses and compile and critically assess information for problem-solving, using the scientific method.
- Indicate the most suitable treatment for the most prevalent acute and chronic processes, and for the terminally ill.
- Listen carefully, obtain and synthesise relevant information on patients' problems, and understand this information.
- Maintain and sharpen one's professional competence, in particular by independently learning new material and techniques and by focusing on quality.
- Maintain and use patient records for further study, ensuring the confidentiality of the data.
- Obtain and prepare a patient record that contains all important information and is structured and patient-centred, taking into account all age and gender groups and cultural, social and ethnic factors.
- Perform a general and a system-by-system physical examination appropriate to the patient's age and sex, in complete and systematic way, and a mental evaluation.
- Put forward suitable preventive measures for each clinical situation.
- Recognise and take action in life-threatening situations and others that require an immediate response.
- Recognise the role of complexity, uncertainty and probability in decision-making in medical practice.
- Recognize one's role in multi-professional teams, assuming leadership where appropriate, both for healthcare provision and for promoting health.
- Use information and communication technologies in professional practice.
- Write patient records and other medical documents that can be understood by third parties.

### **Learning Outcomes**

- 1. Acknowledge the importance of research to medical progress.
- 2. Adapt the therapy procedure and the surgical technique, if appropriate, in accordance with the available data.

- 3. Anticipate and compare information for good decision-making.
- 4. Apply basic surgical manoeuvres in practice with simulated models.
- 5. Approach the physical examination not only from the diagnostic perspective, but also the therapeutic perspective, with special emphasis on surgical procedures.
- 6. Back decision-making with the best scientific evidence.
- 7. Be able to work in an international context.
- 8. Build diagnostic and therapeutic algorithms based on the best scientific evidence, taking into account the facilities available.
- 9. Calculate the surgical risk indices, both general and by apparatus, and adjust the indications accordingly.
- 10. Categorise emergency situations in accordance with the available indices of seriousness.
- 11. Choose a therapy option in accordance with available information and patient preference.
- 12. Choose content in accordance with the rules of evidence-based medicine.
- Choose the best possible research design to respond to the hypothesis put forward.
- 14. Convey knowledge and techniques to professionals working in other fields.
- 15. Critique original or review scientific papers.
- 16. Define the statistical methodological bases.
- 17. Demonstrate basic research skills.
- 18. Demonstrate, in professional activity, a perspective that is critical, creative and research-oriented.
- 19. Describe biomedical bibliographic databases and ways to filter the information provided.
- 20. Describe the mechanisms of action of physical and chemical agents on the organism.
- 21. Distinguish the bases of the different surgical specialisations to integrate and lead the treatment in acute and chronic patients with multiple conditions.
- 22. Distinguish the implications of different interventions regarding functional and morphological changes.
- 23. Encourage the search for answers to the questions that arise during surgery.
- 24. Enumerate the alarm signs that require urgent attention to the patient.
- 25. Establish a working hypothesis and its objectives.
- 26. Establish rapport as the first important step in all medical procedures, both in elective and emergent situations and leave a written record of the information transmitted and the wishes of the patient.
- 27. Estimate the risks and benefits of the various therapy options.
- 28. Evaluate the appropriate scientific methodology for a biomedical paper.
- 29. Formulate and discuss the results obtained.
- 30. Formulate hypotheses and compile and critically assess information for problem-solving, using the scientific method.
- 31. Further investigate the risk factors of morbidity and mortality in operations.
- 32. Gather information and select the most important facts about the patient, both in normal visits and emergencies.
- 33. Identify all prophylactic measures to reduce indices of morbidity and mortality to the minimum.
- 34. Identify emergency situations and establish an order of priorities.
- 35. Identify funding sources and set up a budget.
- 36. Identify the ethical bases for decision-making in the field of surgery.
- 37. Identify the legal bases for creating, maintaining and using databases that contain medical information.
- 38. Integrate all pre-operative information for decision-making.
- 39. Justify decisions taken based on the information obtained.
- 40. Maintain and sharpen one's professional competence, in particular by independently learning new material and techniques and by focusing on quality.
- 41. Make a critical analysis of the objectives to be achieved with surgery, contrasting this with the adverse effects that may be involved.
- 42. Manage the information available and set levels of discussion in multidisciplinary groups.
- 43. Obtain the most important data, both on the illness being treated and on factors influencing morbidity and mortality.
- 44. Participate in the whole process of patient-care, from diagnosis to aftercare.
- 45. Perform the initial assessment automatically and acknowledge the actions that require an immediate response.
- 46. Present results orally or in writing.
- 47. Provide clear, comprehensible information on the therapy options to patients and their families.
- 48. Provide the bases for preparing clinical guides and constructing diagnostic and therapeutic algorithms.
- 49. Recognise when a patient is in the terminal phase and avoid therapeutic obstination.

- 50. Transmit information clearly and accurately, leaving no room for possible misunderstandings.
- 51. Transmit the information on the surgical procedure to be performed and draw up a document of informed consent.
- 52. Use information and communication technologies in professional practice.
- 53. Use the scales that assess the general (physical and mental) state of the patient.
- 54. Use the specific bibliographic sources that will help to develop further one's knowledge.

#### Content

MAX 1 Dental basics for doctors I

Subject: Anatomy of the stomatognathic system. Dental nomenclature. Chronology of teeth eruption. Dentistry and its specialties. Image diagnosis.

MAX 2 Dental basics for doctors II

Subject: Odontogenic infections. Caries. Periodontal disease. Severe infections of the cervical-facial areas. Fungal infections of the oral cavity. Other infections.

MAX 3 Dental basics for doctors III

Subject: Pathology of teeth eruption: agenesis, inclusions and supernumerary teeth. Orthodontics for doctors.

MAX 4 Dental basics for doctors IV

Subject: Rehabilitation of teeth and alveolar processes. Removable prosthesis. Fixed prosthesis. Dental implants.

MAX 5 Diseases of the oral mucosa

Subject: Premalignant lesions, leucoplakia, erythroplakia, oral manifestations of systemic diseases

MAX 6 Pathology of occlusion and the temporomandibular joint

Subject: Fundamentals of occlusion. Pain-dysfunction syndrome of the TMJ. Bruxism. Mandibular distraction Temporomandibular joint surgery.

MAX 7 Pathology of salivary glands I

Subject: Inflammatory pathology of the salivary glands. Lithiasis.

MAX 8 Pathology of salivary glands II

Subject: Tumors of salivary glands.

MAX 9 Congenital craniofacial malformations

Subject: Congenital dental malformations, facial fissures, craniofacial syndromes.

MAX 10 Cysts and odontogenic tumors

Subject: Cysts. Odontogenic tumors.

MAX 11 Oral and oropharyngeal cavity cancer

Subject: Epidemiology and risk factors. Premalignant lesions. Diagnosis protocols and treatment.

MAX 12 Craniofacial reconstructive surgery

Subject: Local flaps. Myocutanis flaps. Microvascularized flaps. Mandibular reconstruction. Face transplant.

MAX 13 Dentofacial deformities

Subject: Diagnosis and planning. Sagittal deformities. Facialasymmetries. Osteogenic distraction.

MAX 14 Face aesthetic surgery

Subject: Rhinoplasty. Blepharoplasty. Cosmetic surgery. Minimal invasive techniques.

MAX 15 Maxillofacial trauma

Subject: Nasal fractures. Mandibular fractures. Fractures of the middle third of the face. Fronto-ethmoid-orbital fractures. Frontal sinus fractures.

Optional seminars

SEM1

Basic oral exploration

SEM2

Evaluation of orthopantomography

SEM3

Assessment of facial trauma

SEM4

Assessment of cervical tumor

## Methodology

DIRECTED TEACHING TYPOLOGIES

Theory (lectures, TE typology). Group size: registration group. Scheduled sessions: 15 (1h per session)

SUPERVISED TEACHING TYPOLOGIES

ASTENNIAL PRACTICUM WITHOUT GUIDELINES

Period of unregulated curricular practices corresponding to studies in the field of health, during which the student experiences in a real context and acquires specific skills under the direct supervision of the UAB

faculty or external professionals involved. It is not foreseen in the counting of face-to-face activities, although this practice may involve individual or group work meetings with the UAB faculty. Therefore, only follow-up and evaluation of the students are computed. In this calculation, the preparation will also be implicit.

The student will acquire the commitment of preserving the confidentiality and the professional secrecy of the data to which he / she may have access due to his / her learning in the assistance services. Also in maintaining an attitude of professional ethics in all its actions.

AUTONOMOUS WORK (50-55% of the total 37.5-41.25 hours)

Comprehensive reading of texts and articles, study and realization of schemes, summaries and conceptual assimilation of the contents. Preparation of presentations and deliveries.

EVALUATION (5% of the total, 3.75 hours)

Exceptionally, according to the criteria of the responsible professors, depending of the available resources and the health situation, part of the contents corresponding to the theoretical lessons, practices and seminars may be delivered online or in other alternate methods.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

#### **Activities**

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
CLINICAL CARE PRACTICES	15	0.6	2, 31, 9, 8, 20, 21, 22, 41, 11, 53, 5, 24, 27, 37, 34, 33, 38, 43, 47, 49, 54
Type: Supervised			
THEORY	15	0.6	2, 9, 8, 21, 41, 11, 53, 5, 27, 37, 33, 38, 43, 47, 49, 54
Type: Autonomous			
PREPARATION OF WRITTEN WORKS / SELF STUDY / READING OF ARTICLES / REPORTS	41.25	1.65	2, 31, 9, 8, 20, 21, 22, 41, 11, 53, 5, 24, 27, 37, 34, 33, 38, 43, 47, 49, 54

## Assessment

Written evaluation through objective tests: Selection issues / Restricted questions

50%

Evaluation through case studies and problem solving

40%

Attendance and active participation in class and seminars

10%

Students who fail to carry out both theoretical and practical evaluation tests will be considered as Not evaluated by exhausting the rights to the registration of the subject

The subject contemplates a second-chance examination for students who have not passed the contents of the final evaluation, with a format to be determined.

#### **Assessment Activities**

Title	Weighting	Hours	ECTS	Learning Outcomes
Attendance and active participation in class and seminars	10%	0	0	2, 3, 4, 31, 6, 28, 9, 10, 8, 15, 16, 17, 18, 20, 19, 21, 22, 41, 11, 53, 5, 14, 24, 13, 26, 25, 27, 30, 42, 37, 36, 35, 34, 33, 23, 38, 39, 40, 43, 47, 44, 29, 46, 48, 45, 49, 32, 12, 7, 50, 51, 54, 52, 1
Evaluation through case studies and problem solving	40%	2.75	0.11	2, 31, 9, 8, 20, 21, 22, 41, 11, 53, 5, 24, 27, 37, 34, 33, 38, 43, 47, 49, 54
Objective test of multiple choice	50%	1	0.04	2, 31, 9, 8, 20, 21, 22, 41, 11, 53, 5, 24, 27, 37, 34, 33, 38, 43, 47, 49, 54

# **Bibliography**

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- Cirugía buco-maxilofacial. 5a ed, [reimpr.]. Buenos Aires [etc.]: Médica Panamericana; 1986.
- Baladrón J. Cirugía maxilofacial. 10a ed. Oviedo: Curso Intensivo MIR Asturias; 2005.
- Raspall G. Cirugía oral e implantología. 2a ed. Buenos Aires, (etc.): Médica Panamericana; 2006.
- Sociedad Española de Cirugía Oral y Maxilofacial. Cirugía oral y maxilofacial. 3a ed. Buenos Aires;
   Madrid [etc.]: Médica Panamericana; 2011.
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- Manual de cirugía oral y maxilofacial. 2a ed. Madrid: Sociedad Española de Cirugía Oral y Maxilofacial [etc.]; 2004.
- Master techniques in facial rejuvenation. Philadelphia, PA: Elsevier Saunders; 2007.
- Pifarré Sanahuja E. Patología quirúrgica oral y maxilofacial. Barcelona: Jims; 1993.
- Raspall G. Tumores de cara, cabeza y cuello: atlas clínico. 2a ed. Barcelona, [etc.]: Masson; 2000.

#### Software

Adobe Acrobat Reader