

1. BASIC INFORMATION

Course	Head & Neck Anatomy
Degree program	Dentistry
School	Facultad de Ciencias Biomédicas y de la Salud
Year	2º
ECTS	6 ECTS
Credit type	Comulsory
Language(s)	English
Delivery mode	Face to face
Semester	1st semester
Academic year	2020/2021
Coordinating professor	Santiago Peydró Tomás

2. PRESENTATION

This subject introduces the student to the main anatomical structures and systems of the head and neck. It is presently considered to be, and therefore taught as, an essential component of the dental curriculum due to its connections with other subjects such as, physiology, pathophysiology, dental anesthesia and oral surgery.

The goals of this subject are:

To provide and develop the knowledge of the oral and craniofacial anatomy, as well as the topographic anatomy of the head and neck.

3. COMPETENCIES AND LEARNING OUTCOMES

Basic Competences

CB1 - Students must demonstrate to have gained a better knowledge in the studied field. The basis for these studies come from general secondary

education and reach levels that, whilst supported by advanced textbooks, includes some aspects that imply knowledge of the forefront of their field of study.

CB3 - Students may have the ability to gather and interpret relevant data (usually within their field of study) to inform judgments that include reflection of relevant social, scientific or ethical nature.

CB5 - Students will have developed those learning skills needed to undertake further study with a high degree of autonomy.

General Competences

CG11 - Ability to understand the basic biomedic sciences in which Dentistry is founded to ensure a proper buco-dental assistance.

CG12 - Ability to understand and recognize the structure and function of the stomatognathic system at molecular, cellular, tissular, and organic levels during the diverse stages of life.

CG18 - Knowledge to critically asses and use clinical and biomedical information sources to obtain, organize, interpretate and communicate sanitary and scientific information.

CG19 - Knowledge of the scientific method and to have critical ability to asses established knowledge and new information. Be able to hypothesize, recollect and asses critically the information to resolve problems following the scientific method.

CG7 - Ability to promote new knowledge autonomous learning and techniques, as well as motivation to quality.

Cross-curricular Competences

CT2 - Self-confidence: The student will be able to be sure and with enough motivation to achieve their goals

CT5 - Interpersonal understanding: The student will be able to perform active listening in order to reach agreements using an assertive communication style.

CT8 - Initiative: The student will be able to proactively anticipate proposing solutions or alternatives to different situations.

CT9 - Planning: The student will be able to effectively determine his/her goals and priorities, defining actions, deadlines and optimal resources required to achieve those goals.

Specific Competences

CE01 - Ability to understand the basic biomedic sciences in which Dentistry is founded to ensure a proper buco-dental assistance. This sciences include proper content about Embryology, anatomy, histology and physiology of human body, genetic, biochemistry, cell biology, microbiology and immunology.

CE02 - To know the function and the morphology of the stomatognathic system, including specific knowledge about embryology, anatomy, histology and physiology.

1. Learning outcomes

RA1: To understand and manage the general concepts of osteology, myology and neuroanatomy of the head and neck, with clinical-therapeutic guidance

RA2: Knowledge and comprehension of the arterial, venous and lymphatic systems of the head and neck, with clinical-therapeutic guidance.

The following table shows the relationship between the competencies developed during the course and the learning outcomes pursued:

Competences	Learning outcomes
CB1, CB3, CB5, CG11, CG12, CG18, CG7,CT2, CT9, CE01,CE02	RA1

CB1, CB3, CB5, CG11, CG12,
CG18, CG7, CT2, CT9, CE01,
CE02

RA2

4. CONTENT

THEORETICAL PROGRAM:

Unit 1. Anatomical references. Terminology.

Unit 2. Embriology of the craniofacial structures.

Unit 3. Cranial and facial osteology

Unit 4. Cranial bones I: Frontal, parietal and occipital

Unit 5. Cranial bones II: Ethmoid, sphenoid and temporal

Unit 6. Facial bones I: Zygomatic, inferior nasal conchae, lacrimal and vomer

Unit 7. Facial bones II: Maxilla, mandible and palatine

Unit 8. Cranial fossae I: temporal, zygomatic and pterigopalatine. Cranial fossae II: nasal and orbital.

Unit 9. Anatomy of the temporo-mandibular joint.

Unit 10. Muscles of the head I: muscles from the 1st branchial arch: masticatory muscles: masseter and temporal.

Unit 11. Muscles of the head II: muscles from the 1st branchial arch: masticatory muscles: lateral pterygoid, mylohyoid, anterior belly of the digastric

Unit 12. Muscles of the head III: muscles from the 2nd branchial arch: posterior belly of the digastric and stylohyoid. Facial muscles

Unit 13. Muscles of the neck: prevertebral, lateral, suprahyoid and infrahyoid muscles. Fascias

Unit 14. Vascular supply I: subclavian artery. Course and branches.

Unit 15 Vascular supply II: carotid common artery. External and internal carotid arteries. Origin, course and relationships

Unit 16. Vascular supply III: Venous system. Internal jugular vein. Origin, course and relationships.

Unit 17. Lymphatic system. Main groups of nodes.

Unit 18. Cranial nerves. Origin, course and relationships.

Unit 19 Trigeminal nerve. Origin, course and relationships. Terminal branches

Unit 20. Ophthalmic nerve. Maxillary nerve. Origin, course and relationships.

Unit 21. Mandibular nerve I. Classification of the branches. Origin, course and relationships.

Unit 22. Mandibular nerve II. Inferior Alveolar nerve and lingual nerve.

Unit 23. Facial nerve. Origin, course and relationships.

Unit 24. Glossopharyngeal, hypoglossus, spinal nerves faríngeo Origin, course and relationships.

Unit 25. Salivary glands. Tongue. Anatomy Lengua. Anatomía.

Unit 26. Pharynx and larynx. Anatomy.

5. TEACHING-LEARNING METHODOLOGIES

The types of teaching-learning methodologies used are indicated below:

Learning outcome	Learning activity	Type of educational activity	Content
			Introduction. Learning guideline explanation
RA1	Practical lesson with anatomical models	Master class/ autonomous learning	Units 1, 3, 4, 5, 6, 7 , 8: Osteology
RA1	Practical lesson with anatomical models	Master class/ autonomous learning	Units 10, 11, 12 , 13: Neuromuscular systems
	Practical	Master	Units 14, 15, 16, 17: Vascular and lymphatic

RA2	lesson with anatomical models	class/ autonomous learning	systems
RA1	Practical lesson with anatomical models	Master class/ autonomous learning	Units 18, 19, 20, 21, 22, 23 ,24: Nervous system
RA1	Practical lesson with anatomical models	Master class/ autonomous learning	Units 2, 9, 25 , 26: Embriology and regional anatomy
RA1, RA2	Practical exams	Formative Assessment	Practical tests with anatomical pictures
RA1, RA2	Knowledge acquired assessment		Written Exam. Problem solving

6. LEARNING ACTIVITIES

Listed below are the types of learning activities and the number of hours the student will spend on each one:

Type of educational activity	Number of hours
Master class	103,75 h
Problem solving/ Assessment	7,5h
Practical tasks	8,75h
Tutorials	20h
Practicals	10h

7. ASSESSMENT

Listed below are the assessment systems used and the weight each one carries towards the final course grade:

Assessable activity	Assessment criteria	Weight (%)
Written Knowledge exams	Short open questions	60%
Practical tasks	Short open questions	20%
Practicals	Short open questions	20%

When you access the course on the *Campus Virtual*, you'll find a description of the assessment activities you have to complete, as well as the delivery deadline and assessment procedure for each one.

7.1. First exam period

To pass the course in the first exam period, you must obtain a final course grade of at least 5 out of 10 (weighted average).

In any case, you will need to obtain a grade of at 5.0 in the final exam in order for it to count towards the final grade along with all the grades corresponding to the other activities.

7.2. Second exam period

To pass the course in the second exam period, you must obtain a final grade of at least 5 out of 10 (weighted average).

All activities not passed in ordinary call must be approved in the extraordinary call.

In any case, you will need to obtain a grade of at 5.0 in the final exam in order for it to count towards the final grade along with all the grades corresponding to the other activities.

The student must deliver the activities not successfully completed in the first exam period after having received the corresponding corrections from the professor, or those that were not delivered in the first place.

8. SCHEDULE

This table shows the delivery deadline for each assessable activity in the course:

Tipo de prueba	Contenido	Fecha	Ponderación
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1st Partial Exam	Osteology, Neuromuscular systems, Brain & Cranial Nerves	November, 4th	30 %
2nd Partial Exam	Trigeminal nerve, Vascular system, Regional anatomy, Embriology & Dental anatomy	January	30%
Cases	Questions about practical cases	January	10%
Final Practical Exam	Imágenes sobre todo el temario de la asignatura	January	10%
Osteology Practical Exam	Cranial Osteology	September, 30th	5%
Muscles Practical Exam	Masticatory, lingual, facial & deglutition muscles	October, 20th	5%
Nervous System Practical Exam	Brain, Cranial nerves, Facial & Trigeminal nerves	November, 17th	5%
Vascular System Practical Exam	Cranial arteries & veins	December, 16th	5%

This schedule may be subject to changes for logistical reasons relating to the activities. The student will be notified of any change as and when appropriate.

9. BIBLIOGRAPHY

BASIC:

DRAKE, VOGL. GRAY'S ANATOMY FOR STUDENTS. 2ND EDITION. ELSEVIER. 2009

BERKOVITZ, HOLLAND. A COLOUR ATLAS & TEXT OF ORAL ANATOMY. 2ND EDITION. WOLFE PUBLISHING LTD. 1992

SPECIFIC:

STANDRING, BORLEY, COLLINS. GRAY'S ANATOMY. THE ANATOMICAL BASIS OF CLINICAL PRACTICE. 150 YEARS. 40TH EDITION. ELSEVIER. 2009

HANSEN. NETTER'S CLINICAL ANATOMY. 2ND EDITION SAUNDERS ELSEVIER. 2010

NELSON. WHEELER'S DENTAL ANATOMY, PHYSIOLOGY And OCCLUSION. ELSEVIER
2015

10. DIVERSITY MANAGEMENT UNIT

Students with specific learning support needs:

Curricular adaptations and adjustments for students with specific learning support needs, in order to guarantee equal opportunities, will be overseen by the Diversity Management Unit (UAD: Unidad de Atención a la Diversidad).

It is compulsory for this Unit to issue a curricular adaptation/adjustment report, and therefore students with specific learning support needs should contact the Unit at unidad.diversidad@universidadeuropea.es at the beginning of each semester.

11. ONLINE SURVEYS

Your opinion matters!

The Universidad Europea encourages you to participate in several surveys which help identify the strengths and areas we need to improve regarding professors, degree programs and the teaching-learning process.

The surveys will be made available in the “surveys” section in virtual campus or via e-mail.

Your assessment is necessary for us to improve.

Thank you very much for your participation.