

1. BASIC INFORMATION

Course	Physiology of the stomatognathic system
Degree program	Degree in odontology
School	Faculty of Health Sciences
Year	Second
ECTS	6
Credit type	Basic
Language(s)	English
Delivery mode	Presential
Semester	First
Academic year	2024-2025
Coordinating professor	Sandra Atiénzar Aroca

1. PRESENTATION

This subject explains in detail the functioning of the various parts that are included in the oral cavity. These concepts are fundamental to the professional development of dentists, as this system is the focus of dentistry. In addition, it will be essential that the trainee's training correctly learns how to gather information on various related topics and draw conclusions about them. This point is crucial for professional development, as science continues to evolve and intellectual and scientific stagnation is unethical and unethical.

2. COMPETENCIES AND LEARNING OUTCOMES

Core competences:

- BC1 - That students have demonstrated possession and understanding of knowledge in the area of study founded in general secondary education.
- BC3 - That students have the ability to collect and interpret relevant data to judge relevant social, scientific and ethical issues.
- BC5 - That students have developed these learning skills for further study on their own.

Cross-curricular competencies:

- CC2 - Self-confidence: ability to act with firmness and sufficient motivation to achieve one's objectives.
- CC5 - Interpersonal understanding: ability to actively listen in order to reach agreements using assertive communication.
- CC8 - Initiative: Ability to anticipate proactively, proposing alternatives or solutions to the situations presented.
- CC9 - Planning: Ability to effectively determine objectives and priorities, defining the actions, deadlines and optimisation resources necessary to achieve these objectives.

Specific Competences:

- SC01 - Ability to understand the basic biomedical sciences on which dentistry is based to ensure adequate oral health care. These sciences include appropriate content on embryology, anatomy, histology and physiology of the human body, genetics, biochemistry, cell biology, microbiology and immunology.
- SC02 - Knowledge of the function and morphology of the stomatognathic system, including specific knowledge of embryology, anatomy, histology and physiology.

Learning outcomes:

- LO01 - To determine the specific morphology of each dental organ in humans.
- LO02 - Knowledge of the microscopic characteristics of the various structures of the stomatognathic system.
- LO03 - To understand the physiological mechanisms of the oral organs.
- LO04 - To promote the skills of relating, synthesising, consulting and exposing the content with real practical work situations.

The table below shows the relationship between the competences developed in the subject and the learning outcomes pursued:

Competences	Learning outcomes
CG12, CG18, CG7, CB1, CB3, CT2, CT9, CE01, CE02.	LO01: To determine the specific morphology of each dental organ in humans.
	LO02: Knowledge of the microscopic characteristics of the various structures of the stomatognathic system.
	LO03: To understand the physiological mechanisms of the oral organs. .
CG11, CG18, CG19, CB5, CT2, CT5, CT8, CT9.	LO04: To promote the skills of relating, synthesising, consulting and exposing the content with real practical work situations.

3. CONTENT

- Topic 1: Introduction to embryology.
- Topic 2: Embryology and Odontogenesis.
- Topic 3: Dental eruption.
- Topic 4: Dental tissues I: Pulp.
- Topic 5: Dental tissues I: Dentine.
- Topic 6: Dental tissues II: Enamel.
- Topic 7: Dental tissues III: Cementum and Periodontal Bonding.
- Topic 8: Organs of the oral cavity: lips, tongue, soft and hard palate.
- Topic 9: Salivary glands: General characteristics and regulation.
- Topic 10: Taste receptors.
- Topic 11: Somatic sensitive receptors: touch, pressure and temperature and pain.
- Topic 12: Dental pain.
- Topic 13: Oral muscle and joint receptors.
- Topic 14: Masticatory movements
- Topic 15: Control of mastication
- Topic 16: Swallowing: Nausea and cough reflex.

4. TEACHING-LEARNING METHODOLOGIES

The following are the types of teaching-learning methodologies to be applied:

- Lecture.
- Problem-based learning (PBL).
- Simulation environments.

5. LEARNING ACTIVITIES

The following identifies the types of training activities to be carried out and the student's dedication in hours to each of them:

Campus-based mode:

Learning Activity	Number of hours
Master Classes	104 h
Practical exercise	8,5 h
Case studies	7,5 h
Laboratory practice	10 h
Review sessions	20 h
TOTAL	150 h

6. EVALUATION

The following is a list of the assessment systems and their weighting in the total grade for the course:

Campus-based mode:

Type of evaluation	Assessment system	Weight
Knowledge Test	<p>First Partial (30%) and Second Partial (30%).</p> <p>Each test will include between 20-40 multiple choice questions and 2- 4 reasoning writing questions or structure identification questions using images or anatomical models.</p> <p>As for the multiple-choice format, incorrect answers are marked negative and unanswered questions count 0 points. A mark of 5 or more is compulsory to pass the subject.</p>	60

Laboratory practices	<p>Practical classes are held throughout the year and require prior preparation of students outside the classroom, as well as participation in the classroom and the community.</p> <p>The laboratory sessions will be evaluated by means of a questionnaire at the end of each practical.</p> <p>Attendance at the practicals is 100% compulsory.</p>	20
Practical Exercises	<p>Case studies (5%)</p> <p>Practical exercises (5%)</p> <p>Oral presentation (10%)</p>	20

On the Virtual Campus, when you access the course, you will be able to consult in detail the assessment activities to be carried out, as well as the delivery dates and the assessment procedures for each one of them.

7.1. Ordinary Call

In order to pass the course in the ordinary exam, you must obtain a grade higher or equal to 5.0 out of 10.0 in the final grade (weighted average) of the course.

In any case, you will need to obtain a grade higher or equal to 5.0, independently, in each of the evaluation systems that make up the subject (including the knowledge tests segregated into partial ones). The knowledge tests segregated into partial exams may be assessed on the basis of a grade equal to or higher than 4.

The Universidad Europea de Valencia establishes continuous assessment as the system for assessing knowledge, skills and basic, general, transversal and specific competences of the degree in Dentistry, in accordance with the provisions of the Regulations for the assessment of undergraduate degrees. In this regard, and for the purposes of the use of exam periods, students should be aware that, if they take any of the assessment systems set out in the Learning Guide, in the ordinary exam session the student will have an overall grade for the subject, thus using up the exam period.

In accordance with the aforementioned regulations, students taking face-to-face degree courses are obliged to justify at least 50% of class attendance, as a necessary part of the evaluation process, and in the case of theoretical or practical classes determined as compulsory by the teacher in the course timetables, the student must register 90% attendance, whether the absence is justified or not. The lack of accreditation by the means

proposed by the University will entitle the lecturer to grade the subject as failed in the ordinary call, according to the grading system.

Punctuality will be taken into account, 3 delays of more than 15 minutes or leaving before class will be counted as a lack of attendance.

The student must consult the timetable of the subject on the Virtual Campus for the compulsory classroom sessions.

The mention of 'Matrícula de Honor' will be awarded to students who have obtained a grade equal to or higher than 9.0. Their number may not exceed 5% of the students enrolled in each subject in the corresponding academic year, unless the number of students enrolled is less than 20, in which case only one honourable mention may be awarded.

7.2. Extraordinary Call

In order to pass the course in the ordinary exam, you must obtain a grade higher or equal to 5.0 out of 10.0 in the final grade (weighted average) of the course.

In any case, it will be necessary to obtain a grade greater than or equal to 5.0 in the final test, so that it can be averaged with the rest of the activities.

The activities that were not passed in the ordinary exam must be handed in, after having received the corresponding corrections from the teacher, or those that were not handed in.

The Universidad Europea de Valencia establishes continuous assessment as the system for assessing knowledge, skills and basic, general, transversal and specific competences of the degree in Dentistry, in accordance with the provisions of the Regulations for the assessment of undergraduate degrees. In this regard and for the purposes of the consumption of calls the student should be aware that in the extraordinary call will be the Objective Test of Knowledge (POC) which determines whether or not consumes call and in the exceptional case that only has pending to overcome system / s evaluation that are not the POC, will be considered NP if not presented and will get numerical grade if you submit at least one of them.

In accordance with the aforementioned regulations, students taking on-site degree courses are obliged to justify at least 50% of class attendance, as a necessary part of the evaluation process and in the case of theoretical or practical classes determined as compulsory by the teacher in the course timetables, the student must register 90% attendance, whether the absence is justified or not. Those students who, due to non-compliance with this requirement, must sit the extraordinary exam, must carry out as many activities or knowledge tests as the teacher determines in order to recover this part and its corresponding passing on the basis of the specified rubric.

8. SCHEDULE

In this section you will find the timetable with dates for the delivery of evaluable activities of the subject:

Learning activities	Date
First Parcial	November
Practical exercise	At the end of each theoretical block
Oral Presentation	End of november
Second Parcial	Official convocation in January
Competency-based assessment by rubric in Laboratory Practicals	At the end of each practical lesson
Case studies	October- November

This timetable may be subject to modifications for logistical reasons. Any modification will be notified to the student in due time and form.

9. BIBLIOGRAPHY

The reference work for the follow-up of the subject is:

- Nanci, A. (2017) Ten Cate's Oral Histology: Development, Structure, and Function. St. Louis, Mo: Mosby Elseiver, cop. 9th edition.
- Feher, J. (2017). Quantitative Human Physiology: An introduction. Amsterdam; Boston: Elsevier/AP, Academic Press in an imprint of Elsevier. 2nd edition.
- Silverthorn, DU (2019). Human Physiology: An integrated approach. New York: Pearson Education, Inc. 8th edition.

The following is a recommended bibliography:

- Hargreaves, KM; Goodis, HE and Tay, FR. (2012). Seltzer and Bender's dental pulp. Hanover Park, IL: Quintessence. 2nd edition.
- Silverthorn, D.U. (2008). Fisiología Humana. Un enfoque integrado. 4ª edición. Ed. Panamericana.

10. EDUCATIONAL GUIDANCE AND DIVERSITY UNIT

From the Educational Guidance and Diversity Unit we offer support to our students throughout their university life to help them reach their academic achievements. Other main actions are the students inclusions with specific educational needs, universal accessibility on the different campuses of the university and equal opportunities.

From this unit we offer to our students:

1. Accompaniment and follow-up by means of counselling and personalized plans for students who need to improve their academic performance.
2. In terms of attention to diversity, non-significant curricular adjustments are made in terms of methodology and assessment for those students with specific educational needs, pursuing an equal opportunities for all students.
3. We offer students different extracurricular resources to develop different competences that will encourage their personal and professional development.
4. Vocational guidance through the provision of tools and counselling to students with vocational doubts or who believe they have made a mistake in their choice of degree.

Students in need of educational support can write to us at:

orientacioneducativa.uev@universidadeuropea.es

11. SATISFACTION SURVEY

Your opinion matters!

Universidad Europea encourages you to participate in satisfaction surveys to detect strong points and areas for improvement regarding the teaching staff, the qualification and the teaching-learning process.

The surveys will be available in the survey area of your virtual campus or through your email.

Your assessment is necessary to improve the quality of the degree.

Thank you very much for your participation.