



## Information about the subject

**Degree:** Bachelor of Science Degree in Dentistry

**Faculty:** Faculty of Medicine and Health Sciences

**Code:** 482003 **Name:** Introduction to Dentistry

**Credits:** 6,00 **ECTS Year:** 1 **Semester:** 1

**Module:** Module 2: Introduction to Dentistry

**Subject Matter:** INTRODUCTION TO DENTISTRY **Type:** Elective

**Field of knowledge:** Health Sciences

**Department:** Dentistry

**Type of learning:** Classroom-based learning

**Languages in which it is taught:** English, Spanish

### Lecturer/-s:

OPO1	<u>Andrea Ruiz Hernandez (Responsible Lecturer)</u>	andrea.ruiz@ucv.es
	<u>Maria Desamparados Ibañez-Algarra Hernandez</u>	amparo.ibanez@ucv.es
OPI01	<u>Agustina Muñoz Rodriguez (English Responsible Lecturer)</u>	agustina.munoz@ucv.es
	<u>Lucia Miralles Jorda</u>	lucia.miralles@ucv.es



## Module organization

### Module 2: Introduction to Dentistry

Subject Matter	ECTS	Subject	ECTS	Year/semester
PSYCHOLOGY	6,00	Psychology	6,00	2/2
STATISTICS	6,00	Epidemiology and Statistics	6,00	1/2
INTRODUCTION TO DENTISTRY	42,00	Communication skills	6,00	1/1
		Dental Equipment, Materials and Instrumentation	6,00	2/2
		Imaging techniques and dental photography	6,00	3/2
		Introduction to Dentistry	6,00	1/1
		Oral Radiology	6,00	2/1
		Planning and Management of the dental clinic	6,00	3/2
		Preventive and Community Dentistry	6,00	3/1

## Recommended knowledge

Not required



## Learning outcomes

At the end of the course, the student must be able to prove that he/she has acquired the following learning outcomes:

- R1 Adequately interprets both the verbal and non-verbal content of a message. Captures the signs provided by the patient's eyes, gestures and tone of voice and assess their emotional state and the coherence with the verbal message they convey.
- R2 Identifies the model of attention that the patient needs. Through the interview, the student is able to guide the case and offer the patient the most appropriate response to the perceived needs.
- R3 The student systematizes the different phases of a clinical interview . Knows how to distribute the time of the interview in the different phases: presentation, exploratory, resolution and social applying them to the interviews carried out in the practice.
- R4 Knows the ethical implications derived from the clinical interview. Demonstrates knowledge of the degree of commitment that professional secrecy entails
- R5 The student is able to cope with difficult situations and to communicate bad news. Demonstrates ability to handle interviews with aggressive patients. The student is able to resolve interviews with hyperdemanding patients.
- R6 Knows how to present oneself correctly introducing him/herself to the patient as an introduction to the interview.
- R7 Maintains proper eye contact during the interview.
- R8 Creates a suitable environment in the interview and offers the patient the most favourable environment so that they can communicate what they want: no interruptions, having the necessary time.
- R9 Allows the patient to express him/herself. Lets the patient speak (free narrative phase)
- R10 Knows how to use techniques to empty the information. Asks appropriate questions (targeted narrative phase) to obtain all relevant information. Clearly narrows down the reason for consultation.
- R11 Knows how to be empathetic and makes the patient feel that his/her problems are understood.
- R12 Knows how to be assertive and demonstrates a firm position based on knowledge, experience and beliefs, respecting the decisions and beliefs of the patient.



- R13 Knows how to explore resistance and also investigates the difficulties the patient feels and possible disagreements with the situation posed.
- R14 Knows how to develop the negotiation phase and is able to exchange opinions, redirect ideas and reach an agreement with the patient.
- R15 Knows how to motivate and to introduce the interview aimed at motivating change in its different phases.
- R16 Explores the patient's understanding and ensures that the patient has understood the agreed measures before leaving.
- R17 Establishes safety net. Also warns patients of possible unfavourable developments and makes him/herself available if necessary.
- R18 The student says goodbye properly and greets politely at the end of the interview.
- R19 Knows the anatomical oral-facial structures and their function.
- R20 Knows basic fundamental concepts of dental pathology
- R21 Knows basic fundamental aspects in the treatment of oral pathology.
- R22 The student is able to fill out a complete medical history, knowing its parts.
- R23 Knows how to complete a full dental history.
- R24 Knows the evolution of dentistry along history.
- R25 Learns to recognize the different types of dental products on the market and their indications.
- R26 Shows the necessary skills to take oral samples.
- R27 Knows the anatomical structures of the mouth.
- R28 Recognizes different types of dental treatment performed on a patient.
- R29 Works in an ergonomic position in the dental chair.



- R30 The student is able to make an oral diagnosis on a patient under supervision.
- R31 Knows the different types of radiological techniques applicable to dentistry, differentiating them from each other.
- R32 Distinguishes the anatomy of the oral cavity in each of the radiological techniques used in dentistry (radiological anatomy).
- R33 Knows the alterations produced by cavities in the teeth and their radiological evaluation.
- R34 Familiarizes with the layout and characteristics of radiodiagnostic systems in the workplace, as well as their location according to the characteristics of the site.
- R35 Learns how to use the different radiological diagnostic systems, as well as the choice of the most appropriate one according to the pathology to be assessed.
- R36 Familiarizes with the material used, as well as in its use during treatment.
- R37 Transmits information about what is to be done to the patient, relieving the patient from anxiety when tests are made.
- R38 Learns the placement of the plates in oral and extra oral projections according to the type of technique used, as well as the arrangement of the tube in the performance of each projection.
- R39 Shows manual and automatic plate development.
- R40 Knows the methods of radiological protection of both the patient and the professional against ionising radiation in daily practice.
- R41 The student is able to work as a team.
- R42 The student is able to transmit knowledge orally, clearly and accurately.
- R43 The student is able to develop a public presentation of a research work.
- R44 The student can design a poster following the canons for scientific communications.
- R45 Knows the scientific method and has critical capacity to value the established knowledge and the new information.
- R46 Knows the scientific principles of sterilization, disinfection and antisepsis necessary to prevent cross infection in dental practice.



- R47 Identifies the etiological and risk factors of oral diseases.
- R48 Knows and interprets procedures and tests necessary to identify the risk of the most prevalent oral diseases.
- R49 Knows the methods of prevention and control of oral diseases.
- R50 Knows the procedures to diagnose oral health in the community and knows how to interpret the results.
- R51 Knows and is capable of transmitting the importance of oral health for the maintenance of general health.
- R52 The student is trained in the design and management of individual and community health education techniques.
- R53 Knows how to plan individual and community health programs.
- R54 Knows how to organize and provide oral health care in the community.
- R55 Knows how to use infection control procedures in dentistry.
- R56 Knows how to use procedures and tests necessary to identify the risk of the most prevalent oral diseases.
- R57 Knows how to use methods of prevention and control of the most prevalent oral diseases.
- R58 Applies the principles of ergonomics in dental work, both at an individual level and within the work team when appropriate, as well as the principles of prevention of occupational risks associated with dental practice.
- R59 Knows how to educate and motivate patients in the prevention of oral and dental diseases, controls pathogenic oral habits, instructs them on proper oral hygiene, on dietary and nutritional measures and, in short, on all methods of maintaining oral health.
- R60 Proves knowledge about ergonomics in dentistry.
- R61 Knows the instruments and dental equipment, their maintenance and handling.
- R62 Proves knowledge about ergonomics in Dentistry.



R63 Knows the odontological instruments and equipment, their maintenance and handling.





## Competencies

Depending on the learning outcomes, the competencies to which the subject contributes are (please score from 1 to 4, being 4 the highest score):

GENERAL	Weighting			
	1	2	3	4
CG1   aCapacity for analysis and synthesis				X
CG2   bOrganizational and planning skills			X	

SPECIFIC	Weighting			
	1	2	3	4
CE A 1 Know the essential elements of the dental profession, including ethical principles and legal responsibilities.				X
CE A 2 Understand the importance of such principles for the benefit of the patient, society and the profession, with special attention to professional secrecy.				X
CE A 3 Identify the patient's concerns and expectations, as well as to communicate effectively and clearly, both orally and in writing, with patients, relatives, the media and other professionals.				X
CE A 4 Understand and recognize the social and psychological aspects relevant to the treatment of patients.				X
CE A 5 Know how to apply the principles of anxiety and stress management to oneself, to patients and to other members of the dental team.				X
CE A 6 Understand the importance of developing a professional practice with respect to patient autonomy, beliefs and culture.				X
CE A 7 Promote autonomous learning of new knowledge and techniques, as well as motivation for quality.				X
CE A 8 Know how to share information with other health professionals and to work as a team.				X





CE A 9	Understand the importance of maintaining and using records with patient information for subsequent analysis, preserving the confidentiality of the data.								X
CE A 10	Know and identify the psychological and physical problems derived from gender violence in order to train students in the prevention, early detection, assistance, and rehabilitation of the victims of this form of violence.								X
CE B 11	Understand the basic biomedical sciences on which dentistry is based to ensure proper oral care.								X
CE B 12	Understand and recognize the normal structure and function of the stomatognathic system, at the molecular, cellular, tissue and organic level, in the different stages of life.					X			
CE B 13	Understand and recognize the science of biomaterials essential for dental practice as well as the immediate management of possible allergies to them.							X	
CE B 14	Know about general disease processes, including infection, inflammation, immune system disorders, degeneration, neoplasm, metabolic disorders and genetic disorders.								X
CE B 15	Be familiar with the general pathological features of diseases and disorders affecting organ systems, specifically those with oral impact.								X
CE B 16	Understand the fundamentals of action, indications and efficacy of drugs and other therapeutic interventions, knowing their contraindications, interactions, systemic effects and interactions on other organs, based on available scientific evidence.								X
CE B 17	Understand and recognize the principles of ergonomics and safety at work (including control of cross-infection, radiation protection and occupational and biological diseases).								X
CE B 18	Know, critically evaluate and know how to use clinical and biomedical information sources to obtain, organize, interpret and communicate scientific and health information.								X
CE B 19	Know the scientific method and have the critical capacity to value the established knowledge and the new information. Be able to formulate hypotheses, collect and critically evaluate information for the resolution of problems, following the scientific method.								X
CE E 20	Recognize the determinants of oral health in the population, both genetic and lifestyle-dependent, demographic, environmental, social, economic, psychological and cultural.								X



CE E 3 (Recognise the role of the dentist in actions to prevent and protect against oral diseases, as well as in the maintenance and promotion of health, both at individual and community level. X

CE E 3 (Know the National Health System, as well as the basic aspects of health legislation, clinical management and proper use of health resources, understanding the importance of the role of the dentist in the field of Primary Health Care. X

TRANSVERSAL	Weighting			
	1	2	3	4
1. a. Analysis and synthesis skills				X
1. b. Organizational and planning capacity				X
1. c. Oral and written communication in the native language.				X
1. d. Knowledge of a foreign language			X	
1. e. Computer skills				X
1. f. Information management capacity				X
1. g. Problem solving				X
1. h. Decision making				X
2. i. Teamwork				X
2. j. Multidisciplinary teamwork				X
2. k. Work in an international context				X
2. l. Interpersonal skills				X
2. m. Recognition of diversity and multiculturalism			X	
2. n. Critical Reasoning				X



2. o. Ethical commitment					X
3. p. Autonomous learning					X
3. q. Adaptation to new situations					X
3. r. Creativity					X
3. s. Leadership					X
3. t. Knowledge of other cultures and customs				X	
3. u. Initiative and entrepreneurship					X
3. v. Motivation for quality					X
3. w. Sensitivity to environmental and socio-health issues					X



## Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
R19, R20, R21, R22, R23, R24, R25, R27, R28, R29, R43, R44, R45, R46, R61, R62, R63	15,00%	OPEN QUESTIONS: Written exam in which basic theory knowledge and the ability to relate, integrate and coherently express it in writing is assessed.
R19, R20, R21, R22, R23, R24, R25, R28, R42, R43, R44, R45, R46, R55, R61, R63	60,00%	MULTIPLE CHOICE TEST: Multiple choice test with one correct answer. This shows to greater extent the contents acquired by the student.
R42, R43, R44, R45	5,00%	PRESENTATION: The student develops by means of an oral presentation, supported with audio-visual materials, a theme or topic given by the teacher. At the end of the presentation, the teacher or audience may ask questions.
R3, R19, R20, R21, R22, R23, R25, R26, R27, R29, R46, R47, R48, R49, R55, R56, R59, R61, R62, R63	10,00%	PRACTICAL: Written test in which the student is asked to solve practical exercises, clinical cases or problems about the contents of different subjects.
R43, R44, R45	5,00%	ASSIGNMENTS: The student, either individually or in a group, develops a theme which reviews or researches, and he/she presents it, in writing, for assessment by the teacher.
R19, R20, R21, R22, R23, R24, R25, R46, R47, R48, R49, R51, R55, R56, R61, R63	5,00%	CLASS PARTICIPATION: The teacher assesses the participation, involvement and progress the student makes in acquiring knowledge and skills in theory and practical classes and seminars. This is never more than 5% of the final grade.

### Observations

To pass the subject it is required:- Get a 5 in the exam, combined in both parts of the exam (test and open questions).- Attend the 2 practices: one in clinics and the other in the laboratory/clinic,



both are mandatory (value 10%). You can not miss any practice. If it is missing, it must be duly justified, with the same reasons that appear in the UCV statutes. If it is missing, the student will have to take the subject the next course. In clinics, the student has to comply with the regulations of UCV clinics, in terms of clothing, care of the facilities and behavior. Failure to comply with it will result in a sanction / expulsion from the practice. The student must have the necessary language skills to care for patients in clinical practices.- Do the final work of the subject, as well as its oral presentation, obtaining at least a mark of 5 (value 10%). The final work will be uploaded to the platform in the first half of December. They will not be accepted after the deadline or in the 2nd call. If they are not carried out (work and oral presentation), the student will have to take the subject the next academic year. The exam has a value of 75% of the total mark, it consists of two parts: a test part (value 60%) with 30 multiple choice questions, with 5 possible answers where only one is correct and each incorrect answer subtracts 0.25 % of the note ; and another part of the exam with 5 short-answer questions (value 15%), where the lack of response does not subtract. It is necessary to obtain a grade of 5 to be able to add the notes of the works, practices and class participation. The evaluation of the practices will be carried out based on the proper completion of a clinical history, ergonomics, taking instruments, cleaning them and the box, as well as taking records in the mouth of the students. The rest of the value of the subject, 5%, is provided by class participation.

### MENTION OF DISTINCTION:

In accordance with the regulations governing the assessment and grading of subjects in force at UCV, the distinction of "Matrícula de Honor" (Honours with Distinction) may be awarded to students who have achieved a grade of 9.0 or higher. The number of "Matrículas de Honor" (Honours with Distinction) may not exceed five percent of the students enrolled in the group for the corresponding academic year, unless the number of enrolled students is fewer than 20, in which case a single "Matrícula de Honor" (Honours with Distinction) may be awarded. Exceptionally, these distinctions may be assigned globally across different groups of the same subject. Nevertheless, the total number of distinctions awarded will be the same as if they were assigned by group, but they may be distributed among all students based on a common criterion, regardless of the group to which they belong. The criteria for awarding "Matrícula de Honor" (Honours with Distinction) will be determined according to the guidelines stipulated by the professor responsible for the course, as detailed in the "Observations" section of the evaluation system in the course guide.

## Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

- M1      Lecture.
- Problem Solving.
- Explanation of contents by the teacher.
- Explanation of knowledge and skills.



- M2 Practical basic sciences laboratory sessions, practical simulation laboratory sessions, virtual hospital and dissecting room.
- M3 Problem and case solving.  
Social action activities.
- M5 Problem and case solving. Written tasks.  
Online activity on the e-learning platform.  
Personal study.  
Compiling information and documentation.
- M8 Oral presentations by students.
- M9 Group work: group work sessions supervised by the teacher.  
Knowledge building through interaction and activity of students.
- M10 Carrying out bibliographic reviews and practical work experience dissertations.
- M12 Seminars, supervised monographic classes with shared participation.
- M13 Personal preparation of written texts, essays, problem solving, seminars.
- M15 Personalised Attention. Period of instruction and/or guidance carried out by a tutor with the aim of analysing with the student his/her work, activities and evolution in learning of subjects.



## IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
<b>THEORY CLASS</b> M1, M3, M5, M8, M9, M10, M13	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17	52,00	2,08
<b>PRACTICAL CLINICAL SESSION</b> M1, M3	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R26, R27, R28, R29, R31, R36, R37, R41, R42, R47, R48, R49, R50, R51, R52, R55, R57, R58, R59, R60, R61, R62, R63	8,00	0,32
<b>TUTORING</b> M1, M3, M5, M12, M13, M15	R37, R42, R43, R44	2,00	0,08
<b>EVALUATION</b> M3, M5, M8, M9, M10	R20, R21, R22, R23, R24, R42, R43, R44, R45, R46, R47, R48, R49, R61, R63	2,00	0,08
<b>TOTAL</b>		<b>64,00</b>	<b>2,56</b>

## LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
<b>INDIVIDUAL WORK</b> M3, M5, M8, M10, M13	R1, R3, R42, R43	70,00	2,80
<b>GROUP WORK</b> M3, M5, M8, M9, M10	R1, R8, R41, R42, R43, R44, R45, R46	16,00	0,64
<b>TOTAL</b>		<b>86,00</b>	<b>3,44</b>



## Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
II- INTRODUCTION TO DENTISTRY	<ol style="list-style-type: none"><li>16. Introduction to Dentistry. Medical History: anamnesis, clinical examination and additional tests.</li><li>17. Introduction to Oral Surgery.</li><li>18. Introduction to Oral Pathology.</li><li>19. Introduction to Orthodontics.</li><li>20. Introduction to Restorative Dentistry in children and adults.</li><li>21. Introduction to Endodontics.</li><li>22. Introduction to Prosthesis.</li><li>23. Introduction to Dental Aesthetics.</li><li>24. Introduction to Special Patient Dentistry.</li><li>25. Introduction to Periodontology.</li><li>26. Dental Anatomy.</li><li>27. Dental nomenclature.</li><li>28. Dental clinic: dental clinic distribution and dental chair.</li><li>29. Ergonomy in Dentistry.</li><li>30. Biological risks in Dentistry.</li><li>31. Basic concept of dental instruments.</li></ol>





## I. HISTORY OF DENTISTRY

1. The prehistory. The Paleodontology.
2. The Primitive World: Pre-Columbian America, North America and non industrial societies today.
3. Great civilizations of Antiquity: Egyptians, Phoenicians, Hebrews and Mesopotamy.
4. Classical World: Greece, Etruscans, and Rome.
5. Middle Ages: Byzantine World and Western Europe S. V-XII.
6. Far East: China, India and Japan.
7. Islamic World.
8. Middle Ages: Western Europe S. XIII-XV.
9. Renaissance S. XVI: Dental case first. 1
0. Baroque S. XVII.
11. Illustration S. XVIII: Pierre Fouchard. France, England and Germany.
12. S. XIX. North America.
13. End of the nineteenth century; Europe and North America; Dental big discoveries.
14. S.XX.
15. History of Dentistry in Spain.

### Temporary organization of learning:

Block of content	Number of sessions	Hours
II- INTRODUCTION TO DENTISTRY	16,00	32,00
I. HISTORY OF DENTISTRY	16,00	32,00



## References

1. "Historia Ilustrada de la Odontología". Malvin E. Ring. Mosby/Doyma Libros.
  2. "Historia de la Odontología Española". Javier Sanz. Masson, Madrid. 1999.
  3. "Tratado de Odontología". Tomo I, II, III y IV. Bascones Martínez A. Ed Smithkline Beecham S.A.
  4. "Manual de introducción a la odontología". Castaño Seiquer A. Ed Ripano. 2005.
  5. Woelfel JB, Scheid RC. Anatomía dental. Aplicaciones clínicas. 5th ed. Barcelona: Masson; 1998.
- Articles: Tandon D, Rajawat J, Banerjee M. Present and future of artificial intelligence in dentistry. J Oral Biol Craniofac Res. 2020;10(4): 391-396.



## Addendum to the Course Guide of the Subject

Due to the exceptional situation caused by the health crisis of the COVID-19 and taking into account the security measures related to the development of the educational activity in the Higher Education Institution teaching area, the following changes have been made in the guide of the subject to ensure that Students achieve their learning outcomes of the Subject.

**Situation 1: Teaching without limited capacity** (when the number of enrolled students is lower than the allowed capacity in classroom, according to the security measures taken).

In this case, no changes are made in the guide of the subject.

**Situation 2: Teaching with limited capacity** (when the number of enrolled students is higher than the allowed capacity in classroom, according to the security measures taken).

In this case, the following changes are made:

### 1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject will be made through a simultaneous teaching method combining onsite teaching in the classroom and synchronous online teaching. Students will be able to attend classes onsite or to attend them online through the telematic tools provided by the university (videoconferences). In any case, students who attend classes onsite and who attend them by videoconference will rotate periodically.

In the particular case of this subject, these videoconferences will be made through:

Microsoft Teams

Kaltura



## **Situation 3: Confinement due to a new State of Alarm.**

In this case, the following changes are made:

### **1. Educational Activities of Onsite Work:**

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject, as well as the group and personalized tutoring, will be done with the telematic tools provided by the University, through:

Microsoft Teams

Kaltura

Explanation about the practical sessions:



## 2. System for Assessing the Acquisition of the competences and Assessment System

### ONSITE WORK

#### Regarding the Assessment Tools:

The Assessment Tools will not be modified. If onsite assessment is not possible, it will be done online through the UCVnet Campus.

The following changes will be made to adapt the subject's assessment to the online teaching.

Course guide		Adaptation	
Assessment tool	Allocated percentage	Description of the suggested changes	Platform to be used

The other Assessment Tools will not be modified with regards to what is indicated in the Course Guide.

#### Comments to the Assessment System: