

## 1. BASIC DATA

<b>Asignatura</b>	Implantología Avanzada
<b>Titulación</b>	Dentistry
<b>Escuela/ Facultad</b>	Faculty of Biomedical and Health Sciences
<b>Curso</b>	Fifth grade
<b>ECTS</b>	3 ECTS / 36 h
<b>Carácter</b>	Elective
<b>Idioma/s</b>	English
<b>Modalidad</b>	Face
<b>Semestre</b>	Second semester
<b>Curso académico</b>	2019/2020
<b>Docente coordinador</b>	Dr. Jaime Jiménez

## 2. PRESENTATION OF THE COURSE/MODULE

The importance of the subject material within the study plan is obvious, given that we are going to train future dental experts who, regardless of their held of professional development, i.e., general, restorative, surgical, endodontics, pediatric dentistry, orthodontics, periodontics, prosthesis, cosmetic dentistry, etc., need to have a minimal basic knowledge of implantology as this type of treatment is commonplace and necessary within dentistry knowledge.

Implantology is an elective subject within the degree in dentistry. It is taught in the second semester of 5th year and is worth 3 ECTS credits.

The subject is organized into three Learning Units (L.U.s), which in turn are divided into learning resources.

## 3. COMPETENCIES AND LEARNING OUTCOMES

**Core competencies: (CB)**

- CB2: The students must know how to apply their knowledge to their work or vocation in a professional fashion and have the skills usually demonstrated by drafting and defending arguments and solving problems within their study area.
- CB4: Students must be able to convey information, ideas, problems, and solutions to both specialists and the general public.
- CB5: The students must have developed the learning skills needed to undertake subsequent studies with a high degree of autonomy.

#### **Cross-curricular competencies: (CT)**

- CT1 - Independent learning: A process that allows a person to be the driver of their own development, choosing the paths, strategies, tools, and times they consider most effective for learning and independently putting into practice what they have learned. An independent student, in short, chooses the best strategies to reach his or her learning goals.
- CT2 – Self-confidence: Ability to assess our own results, performance, and capabilities with the internal conviction that we are capable of doing the things and challenges we are asked to do.
- CT4 - Ability to analyze and summarize: Analyzing is the method of reasoning that makes it possible to break complex situations down into their constituent parts and to assess other alternatives and perspectives to find the best solution. Summarizing seeks to reduce complexity in order to better understand and/or solve problems.
- CT5 - Ability to put knowledge into practice: Ability to use the knowledge acquired in the academic sphere in situations as similar as possible to the reality of the profession they are working toward, e.g., by relating theoretical foundations with their application to real problems in daily life; to approach problems and situations related to professional practice, and to solve real questions and/or problems.
- CT6 - Oral/written communication: Communication is the process by which we transmit and receive information, ideas, opinions, and attitudes to achieve understanding and action. Oral communication is performed through words and gestures, while written communication involves reading and/or graphic support.
- CT7 - Awareness of ethical values: Ability to think and act according to universal principles based on the value of the person targeted at their full development and which involve a commitment to certain societal values.
- CT8 - Information management: The ability to seek, select, analyze, and integrate information from different sources.
- CT10: Initiative and entrepreneurial spirit: Preference for assuming and carrying out activities. Ability to undertake difficult or hazardous actions with resolution.

#### **Specific competencies: (CE)**

- CE3. Know how to identify patient concerns and expectations, as well as effectively and clearly communicate both orally and in writing with patients, family members, the media, and other professionals.
- CE4. Understand and recognize the social and psychological aspects relevant to patient treatment.
- CE7. To promote the independent learning of new knowledge and techniques, as well as motivation for quality.
- CE8. Know how to share information with other health professionals and work in a team.
- CE13. Understand and recognize the biomaterial sciences essential for the practice.
- CE12: Understand and recognize the structure and normal function of the stomatognathic apparatus, at the molecular, cellular, tissue and organic levels, in the different stages of life.
- CE13: Understand and recognize the sciences of essential biomaterials for dental practice as well as the immediate management of possible allergies to them.
- CE15: Be familiar with the general pathological characteristics of diseases and disorders that affect organic systems, specifically those that have an oral repercussion.
- CE18: Know, critically assess and know how to use the sources of clinical and biomedical information to obtain, organize, interpret and communicate scientific and health information.
- CE20: Obtain and elaborate a clinical history that contains all the relevant information.
- CE21: Knowing how to perform a complete oral examination, including appropriate radiographic and complementary examination tests, as well as obtaining adequate clinical references.
- CE25: Know and apply the basic treatment of the most common oral pathology in patients of all ages. Therapeutic procedures should be based on the concept of minimal invasion and on a global and integrated approach to oral treatment.
- CE26: Know how to plan and perform multidisciplinary, sequential and integrated dental treatments of limited complexity in patients of all ages and conditions and patients requiring special care.

#### **Learning outcomes: (LO)**

- LO1: Acquire the basic knowledge needed to be able to make diagnoses and treatment plans in which the implants are an alternative in the rehabilitation of the partial and totally edentulous patient.
- LO2: Expand and improve knowledge in the field of dental implantology.
- LO3: Develop skills in the diagnosis of the candidate patient to be subjected to a dental implant treatment including the interpretation of clinical and radiological tests.
- LO4: Develop the training to adequately advise the patient that should be rehabilitated in the different alternatives of conventional removable prosthesis, removable on implants and fixed prostheses tooth supported and implant supported.
- LO5: Acquire competence in the exploration and detection of peri-implant pathology in the patient with dental implants.
- LO6: Increase knowledge about the types of dental implants, their indications and contraindications, the surgical technique, its results, maintenance and complications.

- LO7: Increase knowledge of implant treatment techniques in cases of atrophic maxillae and on the incidence and treatment of peri-implant complications.
- LO8: Know the different types of prosthetic rehabilitations on implants with their indications, results and complications.

The table below shows the relation between the competencies developed during the course and the envisaged learning outcomes:

Competencies	Learning outcomes
CB2, CB4, CT4, CT7, CT8, CE3, CE4, CE12, CE13, CE15, CE18 CE20, CE 21	LO1
CB5, CT1, CT2, CT4, CT5, CT8, CT10, CT7, CE8, CE12, CE13, CE18.	LO2
CB2, CB5, CT1, CT2, CT4, CT5, CT10, CE4, CE8, CE12, CE15, CE18, CE 20, CE21	LO3
CB4, CT6, CE3.	LO4
CB2, CB4, CT4, CT5, CT10, CE7, CE8, CE12, CE13, C15, CE20, CE21.	LO5
CB2, CB4, CB5, CT1, CT2, CT4, CT5, CT8, CT10, CE7, CE8, CE12, CE13, CE15, CE18, CE 25, CE 26	LO6
CB2, CB4, CB5, CT1, CT2, CT4, CT5, CT8, CT10, CE7, CE8, CE12, CE13, CE15, CE18, CE 25, CE26	LO7
CB2, CB4, CB5, CT1, CT2, CT4, CT5, CT8, CT10, CE7, CE8, CE12, CE13, CE15, CE18, CE25, CE26	LO8

#### 4. CONTENT

LU1:

Topic 1. Concept of dental implant. Historical background.

Topic 2. Biology of osseointegration. Characteristics of peri-implant tissues.

Topic 3. Systems and types of implants currently in force.

Topic 4. Treatment planning. Indications. Absolute, relative and temporary contraindications.

Topic 5. Treatment planning. Radiological diagnosis

Topic 6. Treatment planning. Determination of the position, angulation and number of osseointegrated implants required.

Topic 7. Anatomical considerations in implant surgery.

Topic 8. Premedication, sedation, anesthesia and postoperative medication in the patient undergoing treatment with implants.

Topic 9. Surgical act.

Topic 11. Surgery of placement of healing abutments or second stage surgery.

LU2:

Topic 10. Intraoperative and postoperative complications.

Topic 12. Implants in atrophic jaws.

Topic 14. Immediate implants postextraction.

Topic 15. Immediate loading implants.

Topic 16. Maintenance and revisions in patients rehabilitated with implants.

LU3:

Topic 17. Biomechanics in implantology

Topic 18. Rehabilitation in the previous sector. Aesthetic considerations

Topic 19. Unit crowns and partial bridges in the posterior sector

Topic 20. Overdentures

Topic 21. Complete implant supported restorations

Topic 22. Immediate loading prosthesis

## 5.TEACHING-LEARNING METHODOLOGIES

The types of teaching-learning methodologies that will be applied are listed below:

- Master Class
- Case Method
- Problem-Based Learning (PBL)
- Simulation Environments

## 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 Classes	20h
Case Studies	15h
Case Analysis	2,5h
Knowledge Tests	2,5h
Study and self-work	35h
<b>TOTAL</b>	<b>75 h</b>

## 7.ASSESSMENT

The following is a list of the evaluation systems, as well as their weight in the total grade of the subject:

Sistema de evaluación	Peso
Knowledge tests	40%
Case Analysis	30%
Practical Exercises	30%

In the Virtual Campus, when you access the subject, you will be able to consult in detail the evaluation activities that you must carry out, as well as the delivery dates and the evaluation procedures for each of them.

### 7.1. First exam period

To pass the course in the first exam period the student must:

- the weighted average grade of all the activities listed in the table must be 5 or more, and you would also have to achieve a grade 5 or more in the knowledge test.
- you must complete the activities requested by the professor, scoring a weighted average grade of 5 or more overall, and also achieve a grade of 5 or more in the knowledge test.
- The assessable activities and their relative weight in the final assessment of the subject may be subject to changes, of which you would be informed with sufficient time by the professor in the General Forum of the subject.

### 7.2. Second exam period

To pass the course in the second exam period you should:

- the weighted average grade of all the activities listed in the table must be 5 or more, and you would also have to achieve a grade 5 or more in the knowledge test.
- you must complete the activities requested by the professor, scoring a weighted average grade of 5 or more overall, and also achieve a grade of 5 or more in the knowledge test.
- The assessable activities and their relative weight in the final assessment of the subject may be subject to changes, of which you would be informed with sufficient time by the professor in the General Forum of the subject.

## 8.WORK PLAN

The subject is structured into 3 Learning Units; for each one you will cover the topics listed in the previous section, studying each one in depth. You will also carry out Applicable Activities integral to each Unit, and as you progress you will attend an online Seminar.

To see a detailed description of the objective, purpose, method of delivery and evaluation for each of the Applicable Activities, click on the activity within the corresponding Learning Unit.

The submission date for each one of the Applicable Activities and the dates on which the online Seminars are held will be shown in the subject's calendar. If there are any changes made to these dates you will be notified by the professor with enough time in the General Forum and they will be modified on the calendar.

Likewise, you will be informed with enough time of the date and location of the campus-based seminars by the lecturer.

## 9. BIBLIOGRAPHY

Here is the recommended bibliography:

- Jiménez López. (2014). *Ajuste Oclusal en Implantes y dientes naturales*: Oclusion en 3D. Ed: Quintessence.
- Hubertusspiekermann (1995). *Atlas de implantología*. Ed: Masson.
- Carl. E Misch. (2009). *Implantología contemporánea*. Ed: Elseviermosby.
- Carl. E. Misch. (2008). *Prótesis dental sobre implantes*. Ed: Elseviermosby.
- Block. (2002). *Atlas en color de cirugía implantológica dental*. Ed: Panamericana.
- Netter, F.H. (2011). *Atlas de anatomía humana*. Ed: Masson.
- Gaudy, J.F. (2008). *Atlas de anatomía implantológica*. Ed: Masson.

## 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](mailto:unidad.diversidad@universidadeuropea.es) at the beginning of each semester.

**INSTITUTIONAL ASSESSMENT OF LEARNING OUTCOMES PLAN**  
**Covid-19**  
**TEMPLATE TO ADAPT TEACHING AND EVALUATION**  
**ACTIVITIES**

<b>Course/Module</b> ADVANCE DENTAL IMPLANTOLOGY MODULE 6
<b>Degree Program</b> DENTISTRY
<b>Year (1º-6º)</b> 5º
<b>Group (s)</b> M5V-M5W, T53-T54, M58-M59, M56-M57, T5X, M5Z-T5W, M5X-M5Y
<b>Professor</b> Mº JOSE JIMENEZ, JAIME JIMENEZ, SERGIO TRAPOTE
<b>Coordinating professor</b> (Mº JOSE JIMENEZ

Teaching Activity described in the syllabus	Adapated activity in distance learning
Master classes	Master classes online
Case studies ONLINE	case studies ONLINE
case analysis ONLINE	case analisys ONLINE
Knowledge test	Knowledge test online
Study and self work online	Study and self work online



Evaluation Activity that was planned in the Syllabus for face to face instruction		NEW virtual evaluation activity (adapted)	
Description of original face to face evaluation activity	Implant placement with 3i. hands on placing an implant	Description of new activity	Learning online who to place an implant with a life session placing an implant in a tyodont. Perform in the dr's house with a tyodont.
Content to be assessed	Implant surgery		
Learning Outcomes to be assessed <i>(Please check Syllabus of the course/module)</i>	The Learning Outcomes is to have the correct knowledge to perform an implant surgery. LO1, LO2, LO3, LO5, LO6, LO7.		
Duration	1:30 min	Approximate duration	1:30 min on April 18th
Weight in evaluation	10%	Weight in evaluation	10%
Please note:			

Evaluation Activity that was planned in the Syllabus for face to face instruction		NEW virtual evaluation activity (adapted)	
Description of original face to face evaluation activity	Query settlement and subject summary.	Description of new activity	ONLINE SESION WITH A SUMMARY OF THE SUBJET , WITHCASE PRESENTATION
Content to be assessed	RESOLUTION OF THE SUBJECT AND QUESTIONS THAT THE STUDENTS CAN HAVE		
Learning Outcomes to be assessed <i>(Please check Syllabus of the course/module)</i>	The Learning Outcomes that are to have the knowledgeto perform and implant surgery with no doughths, LO1, LO2, LO4. LO8		
Duration	2:30	Approximate duration	2:30 on April 18th
Weight in evaluation	10%	Weight in evaluation	10%
Please note:			

Evaluation Activity that was planned in the Syllabus for face to face instruction		NEW virtual evaluation activity (adapted)	
Description of original face to face evaluation activity	Presential Test Exam	Description of new activity	Online Test Exam
	Evaluation of the knowledge obtain during the subject		
Content to be assessed	The Learning Outcomes that are addressed are t TO VERIFY THE KNOWLEDGE THAT THEY OBTAIN DURING THE COURSE. LO1,LO2,LO3,LO4,LO5,LO6,LO7,LO8		
Learning Outcomes to be assessed <i>(Please check Syllabus of the course/module)</i>			
Duration	45 min	Approximate duration	45min on June 12th
Weight in evaluation	40%	Weight in evaluation	40%
Please note:			

# PLAN INSTITUCIONAL DE EVALUACIÓN DE APRENDIZAJES POR COVID-19

## FICHA DE ADAPTACIÓN DE LAS ACTIVIDADES FORMATIVAS Y DE EVALUACIÓN

<b>Asignatura/Módulo</b> IMPLANTOLOGIA AVANZADA. MODULO 6
<b>Titulación/Programa</b> ODONTOLOGIA
<b>Curso (1º-6º)</b> 5º
<b>Grupo (s)</b> M5V-M5W, T53-T54, M58-M59, M56-M57, T5X, M5Z-T5W, M5X-M5Y
<b>Profesor/as</b> Mº JOSE JIMENEZ, JAIME JIMENEZ, SERGIO TRAPOTE
<b>Docente coordinador</b> Mº JOSE JIMENEZ

Actividad formativa descrita en la Guía de aprendizaje	Actividad formativa adaptada a formato a distancia
Master Classes	Master Classes ONLINE
Ejercicios Prácticos online	Ejercicios Prácticos online
Análisis de Casos online	Análisis de Casos online
Pruebas de conocimiento	Pruebas de conocimiento online
Estudio y Trabajo autónomo online	Estudio y Trabajo autónomo online

Actividad de evaluación presencial planificada según Guía		NUEVA actividad de evaluación que se propone (a distancia)	
Descripción de la actividad de evaluación presencial original	Colocación de implantes con la casa 3i. Práctica de colocación de implante	Descripción de la nueva actividad de evaluación	Enseñanza vía online de la Colocación de implantes con la casa 3i. Realización de la Práctica de colocación de implante impartida en casa del profesor y enseñando el paso a paso
Contenido desarrollado (temas)	-cirugía de un implante		
Resultados de aprendizaje desarrollados (consultar Guía de aprendizaje de la asignatura/módulo)	El objetivo de esta Unidad es conocer el procedimiento adecuado para realizar la parte quirúrgica del tratamiento Implantológico. RA1, RA2, RA3, RA5, RA6, RA7.		
Duración aproximada	1:30 min	Duración aproximada y fecha	1:30min 18 abril
Peso en la evaluación	10%	Peso en la evaluación	10%
Observaciones			
Actividad de evaluación presencial planificada según Guía		NUEVA actividad de evaluación que se propone (a distancia)	
Descripción de la actividad de evaluación presencial original	Sesión presencial resolución de dudas y resumen de la asignatura	Descripción de la nueva actividad de evaluación	Sesión online resolución de dudas y resumen de la asignatura
Contenido desarrollado (temas)	-resolucion de dudas y resumen		
Resultados de aprendizaje desarrollados (consultar Guía de aprendizaje de la asignatura/módulo)	El objetivo de esta Unidad es Conocer el procedimiento adecuado para realizar la parte quirúrgica del tto. RA1, RA2, RA4. RA8		
Duración aproximada	2:30	Duración aproximada y fecha	2:30 horas el 18 abril
Peso en la evaluación	10%	Peso en la evaluación	10%

<b>Observaciones</b>	
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<b>Actividad de evaluación presencial planificada según Guía</b>	<b>NUEVA actividad de evaluación que se propone (a distancia)</b>		
<b>Descripción de la actividad de evaluación presencial original</b>	Examen presencial tipo test	<b>Descripción de la nueva actividad de evaluación</b>	Examen online tipo test
<b>Contenido desarrollado (temas)</b>	- Evaluación de los conocimientos adquiridos		
<b>Resultados de aprendizaje desarrollados (consultar Guía de aprendizaje de la asignatura/módulo)</b>	El objetivo de esta evaluación es asegurarnos de la adquisición de los conocimientos de los alumnos al final del curso  RA1, RA2, RA3, RA4, RA5, RA6, RA7, RA8		
<b>Duración aproximada</b>	45min	<b>Duración aproximada y fecha</b>	45 min el 12 de junio
<b>Peso en la evaluación</b>	40%	<b>Peso en la evaluación</b>	40%
<b>Observaciones</b>			