

## ENGLISH FRIENDLY COURSES (EFC) 2018-2019 – CAMPUS OF BIZKAIA

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In addition to the general offer of courses taught in English, some Centers also offer for incoming students English Friendly Courses (EFC): subjects taught in Spanish, in which the syllabus summary; lecturer tutoring, examinations and/or papers are available in English.

FACULTY OF MEDICINE AND NURSING (327)		SEMESTER	CREDITS	SCHEDULE <sup>1</sup>
26437	<a href="#">Estructura y Función del Cuerpo Humano II</a>	Sep. 2018- Jan. 2019	6	M
27246	<a href="#">Implantología</a>	Jan. 2019- May 2019	6	M/A
27568	<a href="#">Practicum I</a>	Annual	12	M/A
27293	<a href="#">Fisiología</a>	Jan. 2019- May 2019	6	M

<sup>1</sup>SCHEDULE: Morning (M)/ Afternoon (A): begins at 13.30.

By clicking the subject's name, its Syllabus will appear.

## **26437: ESTRUCTURA Y FUNCIÓN DEL CUERPO HUMANO II**

### **DESCRIPTION & CONTEXTUALISATION OF THE SUBJECT**

Throughout this course (SFII), students will acquire basic knowledge about different science fields, such as: genetics, cell metabolism and nutrition, that will help them to understand the function of the human body in a microscopic view.

This subject (SF II) is part of the module Structure and Function of the Human Body, which consists of three subjects: SFI, SFII and SFIII. It complements the anatomical knowledge acquired in the subject SFI, by providing a comprehensive knowledge of the molecular and cellular functioning of the body that is necessary to understand the physiology of body systems (SF III, second term).

The genetic knowledge acquired during this course will help the students to understand how genetic mutations affect the human phenotyps, as well as how they can be inherited throughout generations. Cellular and metabolic knowledge will help students to understand the way that cells get energy from nutrients, once they are digested and absorbed by the digestive tract. For that, it will important to explain the process of digestion from the moment that food enters mouth until it reaches the cell. Finally nutritional knowledge will help students to choose the most adequate and healthy food in order to improve the dietary habits for general population.

Therefore, the subject contributes to having biomedical profile in the field of nursing in order to provide scientific-technical knowledge for understanding the origin of diseases, the healing processes and inflammation by explaining the molecular mechanism of the cells. It contributes to the biomedical need to promote healthy eating habits for the population as a method of health promotion and disease prevention.

Prerequisites for the subject:

The student must have basic knowledge of the cell and its components as well as Mendelian genetics and the processes of cell division (mitosis and meiosis). Also student

must have previewed cellular metabolism of an eukaryotic cell, as well as the chemical structure of the basic nutrients for food: carbohydrates, lipids and proteins. It will be necessary to work the connection of these concepts in class in order to understand the function of cellular metabolism and their integration into the physiological processes of the human body.

## **COMPETENCES/LEARNING OUTCOMES OF THE SUBJECT**

### **SPECIFIC COMPETENCES**

1. Identify the atomic and molecular structure of the main organic compounds and the effects of ionizing radiation in relation to the human body.
2. Explain the basic concepts of genetics and their relationship to the inheritance of human morphophysiological characters.
3. Explain the main cellular metabolic pathways and their regulation.
4. Identify nutritional needs according to the physiological state of the individual by interpreting eating habits.

Transversal competence: Critical Thinking. This competence will be analyzed through the following indicators of competence: formulation and analysis of ones' and others' judgments, use of criteria and awareness of the practical implications.

### **LEARNING ACHIEVEMENTS**

For competence C1: Identify the atomic and molecular structure of the main organic compounds and the effects of ionizing radiation in relation to the human body.

- To differentiate the terms: atom, element, molecule and compound.
- To analyze the structure and function of the following organic molecules: carbohydrates, lipids, proteins and nucleic acids.
- To understand the importance of applied radioactivity in the area of health.
- To recognize and understand the colors and pictograms of radioprotection.

Para la C2: Explain the basic concepts of genetics and their relationship to the inheritance of human morphophysiological characters.

- To differentiate between mitosis and meiosis to understand the importance of cell growth.
- To differentiate the genetic and epigenetic origin of chronic diseases.
- To recognize the main genetic concepts and genomic mutations that are known in humans.
- To recognize the different patterns of human inheritance of a particular pathology by analyzing a genetic pedigree.

Para la C3: Explain the main cellular metabolic pathways and their regulation.

- To identify and understand the different types of metabolism, as well as the stages in which it is subdivided.
- To differentiate the main metabolic control mechanisms of carbohydrates, lipids and proteins.
- To know the main factors that influence the activation or inhibition that regulates the metabolic routes.
- To understand the metabolic effect of hormonal action in different physiological states.

Para la C4: Identify nutritional needs according to the physiological state of the individual by interpreting eating habits.

- To identify the different food groups that contain the essential nutrients.
- To recognize the bad eating habits of the population by analyzing the individual diary intake.
- To explain the concept of balanced diet for the population.
- To know the dietary recommendations for the general population.
- To investigate the effect that additives, good labeling and hygiene in food have on our health.

## **CONTENTS: THEORY AND PRACTISE**

### **UNIT 1 (UT1): BIOPHYSICS AND BASIC RADIOLOGY**

- 1.1. Atoms and atomic bonds
- 1.2. Ionizing radiation and interaction with living matter
- 1.3. Radiobiology and radioprotection

### **UNIT 2 (UT2): HUMAN GENETICS**

- 2.1. Cell division: mitosis and meiosis
- 2.2. Mutations
- 2.3. Human Inheritance

### **UNIT 3 (UT3): BIOCHEMISTRY AND METABOLISM**

- 3.1. Biomolecules (carbohydrates, lipids, proteins, nucleic acids) y biocatalysts (enzymes)
- 3.2. Metabolic reactions: anabolism and catabolism of carbohydrates, lipids and proteins
- 3.3. Regulation of cellular metabolism
- 3.4. Integration of the metabolism of carbohydrates, lipids and proteins

### **UNIT 4 (UT4): NUTRITION**

- 4.1. Food groups
- 4.2. Balanced diet and dietary recommendations
- 4.3. Hygiene and food safety

## **METHODOLOGY**

## **TYPES OF TEACHING**

Seminars: Distributed in 3 sessions, (2 hours each).

In each session, the student will develop some topics related to the matter of the area of knowledge (individually or in groups). The organizational mode of the teaching-learning process involves a deep coverage of a topic related to the matter. Incorporating inquiry-based activities, discussion, reflection and exchange of knowledge.

Classroom Practical works: Distributed in two sessions of 2 hours each.

Each one is performed individually or in pairs. The organizational mode of teaching is focused on the acquisition and application of specific instrumental skills on a particular topic: evaluation of nutritional status.

Theoretical classes: 50 classroom hours

The fundamental concepts and development of the proposed contents are presented in the classroom. These concepts can be worked in groups or individually directed by the lecturer. The purpose is to work the contents of the subject motivating the students to reflect, facilitating the discovery of the relationships between different concepts, forming a critical mentality and stimulating collaborative learning.

## **ORDINARY EXAM CALL**

Mixed evaluation:

This evaluation considers that 50% of the program is evaluated through the continuous evaluation system that is completed with the final test (50%). In this mixed evaluation system of continuous assessment, the evaluation tools will be the individual and group activities and works done in class, in addition to a final written test. A total of 5 activities will be evaluated along the course (a value of 10% each). These activities will be evaluated through the following criteria: quality and adequacy of content, argumentation, creativity/originality, adequate vocabulary to the context and ability to work in a team.

The evaluation method will be based on the following activities proposed for the subject:

The following academic assignments are included in the final assessment (50% of the total, divided by the following activities) that will be worked and evaluated during the course:

- Individual work proposed for laboratory practices (10%)
- Group work: resolution of exercises, cases or problems related to the concepts worked at different teaching modalities (30%).
- Oral presentations related to the subject (10%)

The preparation of the final written exam (50% of the final grade) would consist of:

- Test-type questions, which can be multi-answer or / and only one-answer (no negative points) corresponding to 20% of the total.
- Short questions (20% of the total).
- Questions related to the seminars (10% of the total).
- It is necessary to pass each of the three parts proposed for this final exam (test, short questions about nutrition and seminar) in order to sum up the other 50% and obtain the total evaluation.

Clarifications: The final grade will be established by summing the results obtained by both assessment activities (academic tasks during the course and final exam). To be able to calculate the total punctuation, students need to pass both assessments (academic evaluated assignments and final exam). All academic tasks must be delivered and must pass the minimum level to sum up all the marks. Otherwise, the final exam will be the only task to evaluate the student.

In any case, the students will have the right to be evaluated through the final evaluation system, regardless of whether or not they have participated in the continuous evaluation system. To this end, the students must submit to the teachers responsible for the subject the waiver of the continuous evaluation, for which they will have a period of 9 weeks for the four-month courses to be counted from the beginning of the quarter or year respectively, according to the academic calendar of the center (article 8, BOE 13 March 2017)

## **EXTRAORDINARY EXAM CALL**

1.– Students who do not pass the subject in the regular exam, regardless of the evaluation system chosen, they will have the right to attend the exams and evaluation activities that constitute the final evaluation test of the extraordinary call.

2.- The final evaluation test of the extraordinary call will consist in many exams and evaluation activities are necessary to be able to evaluate and measure the learning process of the student, in a way similar to those evaluated in the regular examination. The positive results obtained by the students during the course can be preserved. In the case of having obtained negative results through the continuous evaluation carried out during the course, these results cannot be maintained for the extraordinary call, in which the students can obtain 100% of the qualification.

## **BIBLIOGRAPHY**

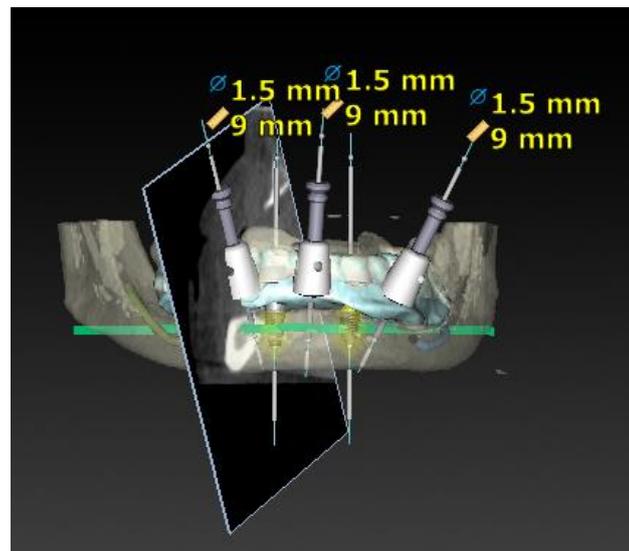
- Biochemistry of Sport and Exercise Metabolism. Don MacLaren. Wiley, 2011.
- Perspectives in Nutrition. Wardlaw & Hampl. 7th Edition. McGraw-Hill International Edition. 2007.



Universidad del País Vasco Euskal Herriko Unibertsitatea

# Implantology

## Teaching Guide



**Degree in Dentistry**

2018-2019

## 1. SUBJECT CONTEXT

### 1.1 GENERAL SUBJECT DETAILS

**Implantology** (UNESCO code 329900) is a subject belonging to the m06 optional module taught in Spanish during the second quarter of year 5 in the Dentistry Master Degree.

This subject is worth 6 ECTS and is divided into: teaching, in and outside class modalities as summarised in the table.

**Table 1** ECTS, teaching modalities, in and outside class hours

Type	Hours in-class	Hours outside-class	Total	ECTS
<b>Masterclasses</b>	17	34	51	2.04
<b>Seminars</b>	6	12	18	0.75
<b>Class practice</b>	18	18	36	1.44
<b>Laboratory practice</b>	0			
<b>Computer practice</b>	0			
<b>Clinical practice</b>	30	15	45	1.8
<b>Total</b>	71	79	150	6

#### 1.1.1. Subject skills

This subject aims for the student to become competent in: establishing a diagnosis, prognosis and execution of a correct therapeutic plan in cases of partially or totally edentulous via dental implants. To establish diagnosis and treatment plan, a student must be capable of taking and interpreting X-rays and other imaging procedures relevant to dentistry. The student must also be skilled in determining and identifying the patient's aesthetic requirements likewise the possibilities of satisfying his/her curiosity.

**Table 2** Specific Implantology skills

Skills	
<b>IP1</b>	Acquire and develop basic implantology and osseointegration knowledge for their application in the diagnosis and treatment of edentulous cases where these techniques can be applied.
<b>IP2</b>	Use said knowledge to coherently resolve clinical cases.
<b>IP3</b>	Draft the clinical history and examine tissues.
<b>IP4</b>	Perform or request complementary tests (X-ray, Scan, and Laboratory.)



<b>IP5</b>	Issue a case diagnosis.
<b>IP6</b>	Establish a treatment plan.
<b>IP7</b>	Analyse, discuss, summarise and express scientific information corresponding to implantology.
<b>IP8</b>	Team work in co-operative implantology tasks, i.e. Help with assistance tasks, discuss diagnoses and co-operate with treatments.
<b>IP9</b>	Show a favourable attitude towards self-learning in implantology, being active and participative in resolving problems and continuous updating.

### 1.1.2 Subject syllabus

The syllabus is divided into 6 blocks:

1. Osseointegration, implant design and its implications.
2. Diagnosis and therapeutic planning.
3. Totally edentulous.
4. Partially edentulous.
5. Increased bone availability.
6. Implant complications, results and maintenance.

Each block is subdivided into the following topics:

- a) Osseointegration, implant design and its implications.
  - Topic 1: Bone healing and osseointegration.
  - Topic 2: Implant designs and surfaces.
- b) Diagnosis and therapeutic planning.
  - Topic 3: Clinical history, examination and diagnosis via imaging.
  - Topic 4: Treatment plan.
- c) Totally edentulous.
  - Topic 5: Surgical aspects.
  - Topic 6: Restorative aspects and options.
- d) Partially edentulous.
  - Topic 7: Surgical aspects.
  - Topic 8: Prosthetic aspects.
- e) Increased bone availability.
  - Topic 9: Guided bone regeneration.
  - Topic 10: Monocortical bone grafts.
  - Topic 11: Elevation of maxillary sinus floor and alveolar distraction.
- f) Implant complications, results and maintenance.
  - Topic 12: Failures and complications.
  - Topic 13: Peri-implant infections.
  - Topic 14: Implant survival and success rate.

## 1.2 PROFESSORS' DETAILS

**Subject Co-ordinator: Luis Barbier Herrero** (Lead Professor)

Telephone: +34 946012922. +34 946006469 E-mail [luisbarbier@gmail.com](mailto:luisbarbier@gmail.com)

Tutorial – Thursdays 8:30am to 11:30am Cruces Hospital Outpatients

### Members of the Teaching Team

**1. - Arteagoitia María Iciar** (Associate Professor)

Telephone: +34 607317915 E-mail [arteagoitia@gmail.com](mailto:arteagoitia@gmail.com) [mariaiciar.arteagoitia@eus.es](mailto:mariaiciar.arteagoitia@eus.es)

Tutorial – Mondays 8:00am to 12:00 midday, Tuesdays 5:00pm to 7:00pm Office 09D1

**2.- Santamaría Gorka** (Associate Professor)

Telephone +34 655721808 E-mail [gorka.santamaria@eus.es](mailto:gorka.santamaria@eus.es)

Tutorial - Mondays 9:00am to 2:00pm, Fridays 8:00am to 9:00am Department Classroom

**4.- Anta Alberto** (Associate Professor)

Telephone +34 619685243 E-mail [alberto.anta@eus.es](mailto:alberto.anta@eus.es)

Tutorial - 9:00am to 2:00 pm Fridays 8:30am to 9:00 am and 2:00pm to 2:30pm Department Classroom

### TASK DISTRIBUTION

**MASTERCLASSES:** Luis Barbier, Gorka Santamaría, Iciar Arteagoitia, Alberto Anta

**SEMINARS:** Gorka Santamaría, Iciar Arteagoitia

**CLASS PRACTICE:** Iciar Arteagoitia . **PBL**

**CLINICAL PRACTICE:** Team 1: Gorka Santamaría

Team 2: Alberto Anta

## 2. TOPIC AREA CHOSEN FOR: MASTERCLASSES, SEMINARS & CLINICAL PRACTICE

The **IMPLANTOLOGY** syllabus can be subdivided into 2 large blocks:

I/ Partially edentulous refers to treatment via prosthetic implant in patients lacking only one or a few teeth.

II/ Totally edentulous refers to treatment via prosthetic implant in edentulous patients.

Teaching will be different in each case.

I/ **Partially edentulous.** In the second quarter of year 5 in the Dentistry Degree, when the optional subject Implantology is first taught, there are only 4 months left to complete degree studies; and students have already acquired vast theoretical knowledge on surgery and prostheses, so they will be skilled in performing rehabilitations via removable partial/complete and permanent prostheses. They know the basic principles of occlusion and have studied the associated pathology. Furthermore, they have developed clinical and surgical skills during the last 3 years performing multidiscipline treatments at the University of the Basque Country UPV/EHU Dental Clinic. All the foregoing, enables students under strict supervision and after training through the implantology subject to rehabilitate straightforward cases of patients missing single teeth or partially edentulous via implants at the Dental Clinical. 84 out of the 150 hours of the subject would be used for this, i.e. 56% of the entire subject and 40% of the topics tackled. The topics tackled are:

### 2.1 MASTERCLASSES

**Day:** Mondays in the 2nd quarter. Timetable WebUnits (2pm – 3pm)

During 50 minutes the professor will explain the most important basic concepts to be skilled at diagnosis, planning and treatment of the most straightforward restoration cases on implants.

Professor	Masterclasses
Santamaría	MASTERCLASS 1: Partially edentulous. Clinical history and examination.
Santamaría	MASTERCLASS 2: Partially edentulous. Photography. Imaging diagnosis. Radiological ferules
Santamaría	MASTERCLASS 3: Partially edentulous. Treatment plan. Surgical ferules
Santamaría	MASTERCLASS 4: Partially edentulous. Surgical aspects, field preparation, drilling sequence
Arteagoitia	MASTERCLASS 5: Partially edentulous. Prosthetic aspects. Waxing. Design. Taking impressions.
Arteagoitia	MASTERCLASS 6: Partially edentulous. Prosthetic aspects. Tests, occlusion

Barbier	MASTERCLASS 7: Partially edentulous. Guided bone regeneration.
Barbier	MASTERCLASS 8: Partially edentulous: Monocortical bone grafts: Elevation of maxillary sinus floor and alveolar distraction
Santamaría	MASTERCLASS 9: Partially edentulous: Peri-implant infections. Maintenance with implant therapy
Santamaría	MASTERCLASS 10: Partially edentulous. Implant survival and success rate.

## 2.2 SEMINARS

Three hours of seminars devoted to presenting and commenting the schedules created for patients at the UPV/EHU Dental Clinic. Professors: Santamaría/ Arteagoitia

## 2.3 CLINICAL EXPERIENCE

Students will do clinical practice on patients at the UPV/EHU Dental Clinic.

Clinical practice (30 hours) will be the main teaching modality for students to learn how to treat the partially edentulous with 3 hours of seminars to discuss the schedules together with 10 hours of masterclass theory.

**Work mode:** Work in pairs, each professor will supervise 3 pairs

**Dental Clinic behaviour – UPV/EHU Dental Clinic Regulations.**

**Clinical practice schedule: 1: SURGERY** – each patient coming for implant treatment will undergo:

STAGES	SURGERY CLINICAL EXPERIENCE
<b>1st Visit</b>	Clinical history, complete intra/extra oral examination, X-rays, models and photographs
<b>Study</b>	Analysis of: clinical history, intra/extra oral examination, X-rays, mould casting and waxing. Analysis with the photographs and plan of each case. Prepare estimate and informed consent. (Work supervised by professor)
<b>2nd Visit</b>	Initial treatment explained to patient and if accepted, complete as necessary (radiological/surgical ferules, analyses or complementary X-rays, pre-surgery medical treatment or other depending on case).
<b>PRESENTATION IN THE SEMINAR</b>	Each pair will prepare the case presentation to be undertaken at the clinic. They must know and explain all aspects related to the clinical case plan and execution.
<b>3rd Visit</b>	Once all the professors have approved the planned case, surgery is scheduled, patient will sign personalised informed consent and estimate; and he/she will receive all the necessary advice.

<b>4th Visit</b>	Surgery: a single case will be done each day by the pair in charge under direct supervision of the professors at the UPV/EHU Implantology Clinic; and the other students can follow the surgery via CCTV with in situ comments from another professor.
<b>5th Visit</b>	Control
<b>6th Visit</b>	Suture removal and prosthetic planning

Patients attending for restoration with prostheses over previously placed implanted will be given appointments on the days without scheduled surgeries. Students will perform prostheses on straightforward cases.

STAGES	PROSTHETIC CLINICAL PRACTICE
<b>1st Visit</b>	Check: clinical history, surgery and fitted implant details, X-rays, mould casts to do waxing and request individual cuvette. Photographs if required. If implants are submerged do or schedule a 2nd surgery.
<b>Study</b>	Analysis of models and waxing. Decide on the best impression technique and prosthesis design to use. (Work supervised by professor)
<b>2nd Visit</b>	Take impressions and base plates and wax rollers to record occlusion if needed. Take impression of facial arch to mount in an articulator if required. Record colour.
<b>3rd Visit</b>	Structural / provisional test/
<b>4th Visit</b>	Occlusion and aesthetic study
<b>5th Visit</b>	Finished prosthesis: cement or screw
<b>6th Visit</b>	Control appointment

All work done at the clinic must be recorded in the practice notebook designed for the same. In any event it will be correctly documented in the clinical practice register

### 3. TOPIC AREA CHOSEN FOR PBL APPLICATION.

#### 3.1 JUSTIFICATION

II/ **Totally edentulous.** There are situations where rehabilitation with prosthetic implant is highly complex requiring specific training in advanced diagnostic, surgical and prosthodontic techniques. For this reason the study of these complex scenarios is best via an active methodology like PBL.

To correctly tackle these complex situations, students must: <sup>1</sup> have exhaustive critical knowledge of different implant surfaces and designs; <sup>2</sup> understand the importance of planning; <sup>3</sup> be



able to handle new imaging analysis and prosthetic design technologies; and <sup>4</sup>know bone availability increase techniques. Therefore, they will attend 7 hours of masterclasses, 3 hours of seminars and 18 hours of class practice. Thus 44% of the total hours for the subject will be imparted via PBL methodology, tackling 60% of the syllabus:

- a) Osseointegration, implant design and its implications.
  - Topic 1: Bone healing and osseointegration.
  - Topic 2: Implant designs and surfaces.
- b) Diagnosis and therapeutic planning (for totally edentulous).
  - Topic 3: Clinical history, imaging diagnosis and examination.
  - Topic 4: Treatment plan.
- c) Totally edentulous.
  - Topic 5: Surgical aspects.
  - Topic 6: Restorative aspects and options.
- e) Bone availability increase (for totally edentulous).
  - Topic 9: Guided bone regeneration.
  - Topic 10: Monocortical bone grafts.
  - Topic 11: Elevation of maxillary sinus floor and alveolar distraction.
- f) Implant complications, results and maintenance (for totally edentulous).
  - Topic 12: Failures and complications.
  - Topic 13: Peri-implant infections.
  - Topic 14: Implant survival and success rate.
  - Topic 15: Implant therapy maintenance.

### 3.2. STRUCTURAL PROBLEM CONSIDERATION

The scenario proposed is a situation at the student’s level of knowledge, which can present itself in any day-to-day of any home, and we consider it important for the student to consider the following question.

### 3.3. PBL DESIGN: LIST OF ACTIVITIES, TIME DEVOTED, ASSESSMENT & SCHEDULE.

PBL Design	Pro-gram me %	Total student hours (T) In class (P) Out of class (NP)	Professor’s in class hours (P) Tutorials (Tu)	Assessment	Implemen tation date
<b>Activity 1</b> Presentation of subject, PBL methodology. Assessment system.		<b>1h 30min T</b> (1h P 30 min NP)	1h P 1h(Tu)	Portfolio	16
<b>Activity 2</b> P0 Problem/scenario presentation and analysis.		<b>1h 30min T</b> (1h P 30 min NP)	1h P 1h(Tu)	Portfolio	16
<b>Activity 3</b> P1 How important is the		<b>11h T</b> (5h 30 min P	5h 30 min P 10h(Tu)	1 Individual assessment. a. Individual test.	19 20



implant used and bone available in the success of oral rehabilitation with prosthetic implant in a totally edentulous patient?	5h 30 min NP)		b. Final assessment test of minimum knowledge. 2 Team assessment. c. Oral presentation. d. Portfolio.	
<b>Activity 4</b> P2 How can I know which is the best possible option to successfully rehabilitate functionally and aesthetically a totally edentulous patient?	<b>19h 30min T</b> (8 h P 11h 30 min NP)	8 h P 12h( Tu)	1 Individual assessment. a. Individual test. b. Final assessment test of minimum knowledge. 2 Team assessment. c. Oral presentation. d. Portfolio.	21 22
<b>Activity 5</b> P3 How can I increase bone availability in a patient lacking sufficient bone to place planned implants?	<b>9 h T</b> (4h 30min P 5h NP)	4h P 8h (Tu)	1 Individual assessment. a. Individual test. b. Final assessment test of minimum knowledge. 2 Team assessment. c. Oral presentation. d. Portfolio.	<b>23</b> <b>24</b>
<b>Activity 6</b> P4 How should I perform surgical and prosthodontic treatment for a successful planned restoration?	<b>12h 30min T</b> (4h 30 min P 8h NP)	4h 30 min P 10H (Tu)	1 Individual assessment. a. Individual test. b. Final assessment test of minimum knowledge. 2 Team assessment. c. Oral presentation. d. Portfolio.	25-30
<b>Activity 7</b> P5 How do I identify, avoid and solve the main complications and causes of failure for prosthetic implant treatment?	<b>9h 30 minT</b> (3h 30minP 6h NP)	3h 30 min P 6h (TU)	1 Individual assessment. a. Individual test. 2 Team assessment. c. Oral presentation. d. Portfolio.	<b>16-30</b>

#### 4. SUBJECT ASSESSMENT

Assessment of Implantology is as follows:

50% of the mark corresponds to assessment of the subject using PBL methodology and the other 50% for the rest of the subject.

Type	Assessment of PBL imparted syllabus (%)	Assessment of rest of syllabus (%)	Total
Individual tests	10		10
Final individual test on minimum knowledge	15	20	35
Oral presentations	10	10	20
Portfolio	15		15
Clinical practice attitude		10	10



and participation			
Clinical Practice Register		10	10
TOTAL	50	50	100

### 1. INDIVIDUAL ASSESSMENT

**A. INDIVIDUAL TESTS.** 5 individual tests will be performed each on completion of a learning objective. 4 of these written individual tests will consist of 2 short questions, assessing theoretical knowledge; and the other to resolve a problem/scenario where diagnostic and analytical capacity, and clinical application of acquired knowledge will be assessed.

**B. FINAL INDIVIDUAL TEST ON MINIMUM KNOWLEDGE.** The professors with the students will define what is essential to learn in each learning objective and at the end of the course this will be assessed via a straightforward questionnaire based on short questions, related questions, a picture, a definition or single word where appropriate.

It will be an individual test exclusively assessed by the professor. The student must pass 90% of the questions to pass the subject. He/she will have 2 opportunities to pass the test.

### C. CLINICAL PRACTICE ATTITUDE AND PARTICIPATION

	A lot	Some	Little	None
Is he/she punctual with all the dental material ready prior to attending the patient?				
Does he/she meet the compulsory dress code, i.e. (medical pyjama and clogs), with hair tied back, no jewellery, correct goggles, gloves and mask?				
Are hygiene and sterilisation correct				
Can he/she identify the patient's concerns and expectations?				
Does he/she explain the treatments as per patient's cognitive level?				
Does he/she fulfil the instructions and guidelines received from the professor in charge?				

**D. CLINICAL PRACTICE REGISTER** All practice tasks must be completed and documentation provided will be borne in mind. The Written Communication Assessment Sheet will be used.

## 2. TEAM ASSESSMENT

**E. ORAL PRESENTATION. (PBL)** 5 presentations will be made either individually or as a team, and assessed pursuant to the following items. All students must make at least 1 Oral Presentation.

**ORAL PRESENTATION. (Clinical cases)** The plan for a clinical case to be undertaken will be presented in pairs. All pairs must present at least one case.

Oral presentation Sheet					
Assessment	1	2	3	4	5
1.- Introduces topic context clearly.					
2.- Communicates key concepts explained via figures or diagrams.					
3.- Information presented comprehensively and organised					
4.- Integrates concepts and ideas, summarising them clearly.					
5.- Skilfully and resolutely uses audiovisual resources.					
6.- Respectfully responds to his/her companions' questions with conceptual basis.					
7.- References used are relevant in number and quality.					
8.- Clear, comprehensible, grammatically correct spoken and written language.					

Each item has a value from 1 to 5 (1: poor; 2: insufficient; 3: acceptable; 4: good; 5: excellent).

**D. PORTFOLIO.** Each team must draft a Portfolio reflecting the results of the team work via the deliverables of each activity.

1. **Assessment of deliverables.** There will be an initial training assessment with feedback for students indicating areas of improvement. The final result will subsequently be assessed and the mark obtained will be the same for all team members.

2. **Assessment of team work.** It will be assessed as per the following protocol:

### A. Team work design

- Clearly and concisely establishes rules of behaviour.
- Specifies team work methodology with definition of team members' roles.

### B. Activities undertaken

- Correctly perform all activities proposed regarding the corresponding tasks.
- Task solutions are well-documented and conceptually based with clear reasoned and reflexive answers.
- Specify corrections/modifications to initial resolutions after analysis of results discussed within a large group.

### C. Learning objectives and their organisation

- Learning objectives achieved clearly expressed

- Well-organised and sequenced learning objectives

Each item has a value from 1 to 10 (1-2 poor; 3-4 insufficient; 5-6 acceptable; 7-8 good ; 9-10 excellent).

## References:

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<b>COURSE: PRACTICUM I</b>		<b>CREDITS: 12</b>
<b>SCHOOL YEAR:</b> 2º	<b>SEMESTER:</b> 1º Y 2º	<b>Academic Year:</b> 2018-2019
<b>LECTURER: ITZIAR HOYOS CILLERO</b>		

### **Program description.-**

Nursing practicums, external experiential education, provide the essential link to the theoretical learning from the classroom to real life. Practicum I is an educational course with university supervision that enable students to apply the knowledge in the clinical setting to further competence development, clinical reasoning and problem solving, as well as communication and leadership skills. These are foundational to both the art and science of nursing, and prepare students as future health professionals to achieve success for developing their profession.

### **Prerequisites for this course.-**

Students must have passed first academic year clinical course "Introduction to Care Practice".

### **Competences.-**

Pre-professional practices, as an independent clinical rotating period with a final evaluation of competences in primary health centers, hospitals and other healthcare centers that will enable students to acquire nursing professional values, healthcare communication competences, as well as, clinical reasoning, clinical management and critical thinking competences. This clinical period, will help students to integrate and apply the knowledge, skills and attitudes in the clinical setting as a professional practice, based on nursing values and principles associated to established competences for general objectives and subjects according to the official nursing degree.

### **Methodology.-**

In this external experiential education period, different agents are involved. First, students who are responsible for their own learning process, taking part in the process itself, and participating in the development and achievement of the competences as well as in the evaluation process.

Moreover, during nursing students' external experiential education period, according to established regulations for students' external practices by the UPV/EHU, other involved agents during this period are:

***Instructor (Clinical setting instructor)***

A professional nurse from a clinical setting, who is in charge of students' educational training during their clinical practice in collaboration with the university.

***University Tutor (Teaching and Research Staff)***

A lecturer from the university, who is responsible for students' monitoring and support during their external experiential education period.

The learning methodology in this course is based on the scientific method for problem solving and the reflective practice, as a way to enable students to learn and acquire the knowledge and strategies to become reflective healthcare professionals.

Practicum I is an educational course with university supervision that enable students to apply the knowledge in the clinical setting to further competence development, clinical reasoning and problem solving, as well as communication and leadership skills. These are foundational to both the art and science of nursing, and prepare students as future health professionals to achieve success for developing their profession.

Practicum I approach stands on the importance of the individualized attention given to each nursing student independently. Each nursing student, monitored by the instructor and the university tutor will define his/her own learning outcomes according to established competences.

All credit hours are presential, according to the Real Decreto 1837/2008, which specifies that all nursing students are required to complete 2.300 hours of clinical practice.

During practicum learning process, at least three tutorials will be held:

**First Tutorial.** At the beginning of the external experiential education period. Learning contract will be undertaken.

**Second Tutorial.** At the mid-point of the external experiential education period. Students' learning process and the achievement of learning outcomes will be valued and enhanced, learning education process will be conducted.

**Third Tutorial.** At the end of the external experiential education period, practicum evaluation will be held, evaluation of the learning outcomes and competences established at the beginning of the course.

## **Evaluation**

The evaluation is a continuous process in which the students demonstrate and argue their learning process progress, as well as, competence improvement and achievement. University tutor will evaluate students' clinical practices, based on clinical instructor and students' own informs, according to established evaluation guidelines and tools.

According to established regulations for students' evaluation of official UPV/EHU's degrees, each student will have for this course one ordinary evaluation session each year only.

Clinical Practice Commission has the legal authority to decide in special and justified cases, the extension of the ordinary evaluation session within the academic year. This exception will not involve clinical practices that have been conducted and not approved for this session/call.

## **Extraordinary evaluation session: information and course dropping**

None.

## **Links.-**

<https://egela.ehu.es/> Course: Practicum I

<http://gestion.ehu.es/gaur>

<https://www.ehu.eus/es/web/enfermeria-leioa/praktika-klinikoak>