

ENGLISH FRIENDLY COURSES (EFC) 2023-2024

CAMPUS OF BIZKAIA

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

English Friendly Courses taught in SPANISH:

FACULTY OF MEDICINE AND NURSING				
COURSE	SEMESTER ¹	CREDITS	SCHEDULE ²	LINK TO SYLLABUS
Bachelor's degree in Dentistry				
27219 Microbiología e Inmunología	1st	8	M	
27222 Farmacología General y Clínica	1st	6	M	
27246 Implantología	2nd	6	A	
27230 Periodoncia I	2nd	6	M	
27231 Periodoncia II	2nd	6	M	
28170 Terapia Quirúrgica Regenerativa en Periodoncia	2nd	6	A	
Bachelor's degree in Medicine				
27276 Microbiología clínica e infección	1st	6	M	
27277 Fundamentos de Farmacología Médica	1st	6	M	
27263 Farmacología Médica Aplicada	2nd	6	M	
27270 Psiquiatría	2nd	6	M	
Bachelor's degree in Physiotherapy				
27894 Farmacología en Fisioterapia	Jan. 2023- May 2023		6	A
Bachelor's degree in Nursing				
27568 Practicum I	1st	12	M/A	
27562 Valoración de los hábitos de vida de una Población	2nd	4,5	M	

¹ SEMESTER: Annual: September 2023 to May 2024

1st: September 2023 to January 2024

2nd : January 2024 to May 2024

² SCHEDULE: Morning (M)/ Afternoon (A): begins at 13.30.

English Friendly Courses taught in BASQUE:

FACULTY OF MEDICINE AND NURSING

COURSE	SEMESTER ³	CREDITS	SCHEDULE ⁴	LINK TO SYLLABUS
Bachelor's degree in Dentistry				
27237 Aho Patologia eta Medikuntza II	Annual	9	M	
27230 Periodontzia I	2nd	6	M	
27231 Periodontzia II	2nd	6	M	
27240 Aho Patologia eta Medikuntza I	2nd	6	M	
Bachelor's degree in Nursing				
27562 Biztanle Taldeen Bizitza Ohiturak Aztertzea	2nd	4,5	M	➡

³ SEMESTER: Annual: September 2023 to May 2024

1st: September 2023 to January 2024

2nd : January 2024 to May 2024

⁴ SCHEDULE: Morning (M)/ Afternoon (A): begins at 13.30.

COURSE GUIDE 2023/24

Faculty 327 - Faculty of Medicine and Nursing
Degree GODONT30 - Bachelor`s Degree in Dentistry

Cycle .
Year .

COURSE

27246 - Implantology

Credits, ECTS: 6

COURSE DESCRIPTION

Implantology (UNESCO code 329900) is a subject belonging to the m06 optional module taught 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. 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.

The specific subject skills are detailed in the "contents description" section of M06 optional module.

COMPETENCIES/LEARNING RESULTS FOR THE SUBJECT

Specific Implantology skills

Skills

IP1 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.

IP2 Use said knowledge to coherently resolve clinical cases.

IP3

Draft the clinical history and examine tissues.

IP4

Perform or request complementary tests (X-ray, Scan, and Laboratory.)

IP5 Issue a case diagnosis.

IP6 Establish a treatment plan.

IP7 Analyse, discuss, summarise and express scientific information corresponding to implantology.

IP8 Team work in co-operative implantology tasks, i.e. Help with assistance tasks, discuss diagnoses and co-operate with treatments.

IP9 Show a favourable attitude towards self-learning in implantology, being active and participative in resolving problems and continuous updating.

Theoretical and Practical Contents

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.
- Topic 15: Maintenance in implant therapy.

TEACHING METHODS

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:

TOPIC AREA CHOSEN FOR PBL APPLICATION.

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: ¹ have exhaustive critical knowledge of different implant surfaces and designs; ² understand the importance of planning; ³ be able to handle new imaging analysis and prosthetic design technologies; and ⁴ 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.

TYPES OF TEACHING

Types of teaching	M	S	GA	GL	GO	GCL	TA	TI	GCA
Hours of face-to-face teaching	17	6	18			30			
Horas de Actividad No Presencial del Alumno/a	35	17	12			15			

Legend: M: Lecture-based S: Seminar GA: Applied classroom-based groups
 GL: Applied laboratory-based groups GO: Applied computer-based groups GCL: Applied clinical-based groups
 TA: Workshop TI: Industrial workshop GCA: Applied fieldwork groups

Evaluation methods

- End-of-course evaluation

Evaluation tools and percentages of final mark

- Written test, open questions 50%
- Exercises, cases or problem sets 50%

ORDINARY EXAMINATION PERIOD: GUIDELINES AND OPTING OUT

"Siguiendo la normativa de la UPV/EHU, ya que la prueba final de esta asignatura es superior al 50% de la calificación total de la asignatura Cirugía Bucal I, no presentarse a dicha prueba supondrá la renuncia a la convocatoria de evaluación".

Se concederá una matrícula de honor por cada 20 alumnos o fracción según normativa de la UPV/EHU, pudiéndose en su caso convocar un examen a tal fin.

EVALUACIÓN DEL TEMARIO IMPARTIDO CON aprendizaje basado en problemas (APB). (50%)

- Pruebas individuales (10%): 5 preguntas individuales (preguntas cortas y una resolución de problema o escenario) que serán autocorregidas y evaluadas entre compañeros.
- Prueba final Individual de conocimientos mínimos (15%): cuestionario de preguntas cortas, preguntas de relación, en un dibujo, una definición o una única palabra, según el caso.
- Presentaciones orales (10%). Evaluación de presentaciones individuales o en grupo.
- Portafolio (15%). Evaluación de los resultados de trabajo en grupo.

EVALUACIÓN DEL RESTO DEL RESTO DEL TEMARIO (50%)

- Prueba final Individual de conocimientos mínimos (20%).
- Presentaciones orales (10%).
- Actitud y participación en la práctica clínica (10%).
- Cuaderno de prácticas clínicas (10%).
- En situaciones excepcionales, como la pandemia por Covid-19, en que no pueda haber una prueba escrita conjunta, o algún alumno no asista a la misma, se realizará un examen oral junto con la evaluación continua que haya podido realizarse.

EXTRAORDINARY EXAMINATION PERIOD: GUIDELINES AND OPTING OUT

Mismos criterios que en la convocatoria ordinaria.

MANDATORY MATERIALS

BIBLIOGRAPHY

Basic bibliography

- Lindhe J. Clinical Periodontology and Implant Dentistry. 5th edition, ed. Blackwell Munksgaard, 2008
- Norton M.: Implantes Dentales: Sistema Astra Tech. Ed Marban Madrid 1998.
- Sociedad Española de Periodoncia y Osteointegración. Manual SEPA de Periodoncia y Terapéutica de implantes: Fundamentos y guía práctica. Ed Médica Panamericana, Madrid, 2005.
- Bert L. Complicaciones y fracasos en implantes osteointegrados. Editorial Salvat. Barcelona. 1994.
- International Team of Implantology. The SAC classification in implant dentistry. Ed ITI. Basilea. 2009
- Sociedad Española de Periodoncia. Manual SEPA de Terapéutica de Implantes en Manual SEPA de Periodoncia y Terapéutica de Implantes. TOMO II. Ed Interamericana. Barcelona. 2005
- Lindhe J. Implantología Aplicada en Periodoncia Clínica e Implantología Aplicada. Ed Panamericana 2009
- Santamaría J , Barbier L. Cirugía Bucal. Guía Práctica. Servicio de Publicaciones de la Universidad del País Vasco/Euskal Herriko Unibertsitatea. Leioa. 2003.
- Peñarrocha M. Implantología Oral. Ed Ars Medica. 2005

Detailed bibliography

Journals

Web sites of interest

OBSERVATIONS

COURSE GUIDE 2023/24

Faculty 327 - Faculty of Medicine and Nursing
Degree GMEDIC30 - Bachelor`s Degree in Medicine

Cycle .
Year Third year

COURSE

27276 - Clinical Microbiology & Infection

Credits, ECTS: 6

COURSE DESCRIPTION

The subject "Clinical Microbiology and Infection" sets out to give an overall vision of infectious diseases from the etiological point of view. The etiology and the pathogenicity mechanisms of the main infectious processes, the correct steps and clinical samples to make a laboratory diagnosis, and an analysis of the microbiological factors that determine antibacterial treatments. The main aim is to acquire the necessary knowledge to establish a strategy and a diagnostic opinion on microbial diseases, indicate a safe and efficient course of treatment and propose the most suitable preventive measures.

COMPETENCIES/LEARNING RESULTS FOR THE SUBJECT

COMPETENCIAS DE LA TITULACION.

- Comprender y reconocer la estructura y función normal del cuerpo humano, a nivel molecular, celular, tisular, orgánico y de sistemas, en las distintas etapas de la vida y en los dos sexos.
- Reconocer las bases de la conducta humana normal y sus alteraciones.
- Comprender y reconocer los efectos, mecanismos y manifestaciones de la enfermedad sobre la estructura y función del cuerpo humano.
- Comprender y reconocer los agentes causantes y factores de riesgo que determinan los estados de salud y el desarrollo de la enfermedad.
- Comprender los fundamentos de acción, indicaciones y eficacia de las intervenciones terapéuticas, basándose en la evidencia científica disponible.
- Tener capacidad para elaborar un juicio diagnóstico inicial y establecer una estrategia diagnóstica razonada.
- Establecer el diagnóstico, pronóstico y tratamiento, aplicando los principios basados en la mejor información posible y en condiciones de seguridad clínica.
- la terapéutica más adecuada de los procesos agudos y crónicos más prevalentes, así como de los enfermos en fase terminal.
- Plantear y proponer las medidas preventivas adecuadas a cada situación clínica
- Adquirir experiencia clínica adecuada en instituciones hospitalarias, centros de salud u otras instituciones sanitarias, bajo supervisión, así como conocimientos básicos de gestión clínica centrada en el paciente y utilización adecuada de pruebas, medicamentos y demás recursos del sistema sanitario
- Redactar historias clínicas y otros registros médicos de forma comprensible a terceros.
- Comunicarse de modo efectivo y claro, tanto de forma oral como escrita, con los pacientes, los familiares, los medios de comunicación y otros profesionales.
- Establecer una buena comunicación interpersonal que capacite para dirigirse con eficiencia y empatía a los pacientes, a los familiares, medios de comunicación y otros profesionales.

COMPETENCIAS DEL MÓDULO QUE SE DESARROLLAN EN ESTA ASIGNATURA (Copia exacta de las competencias de la Orden ECI/332/2008)

- Conocer los principales agentes infecciosos y sus mecanismos de acción.
- Reconocer, diagnosticar y orientar el manejo de las principales patologías infecciosas en los distintos órganos y aparatos.
- Enfermedades de transmisión sexual.
- Reconocer, diagnosticar y orientar el manejo de las principales patologías del sistema inmune.

OBJETIVOS FORMATIVOS (DE APRENDIZAJE) DE LA ASIGNATURA

1. Relacionar los mecanismos de patogenicidad de los principales agentes infecciosos con los cuadros infecciosos.
2. Analizar los cuadros infecciosos desde el punto de vista etiológico.
3. Saber establecer la estrategia adecuada para el diagnóstico microbiológico e interpretar los resultados.
4. Comprender los mecanismos de defensa eficaz contra los principales agentes infecciosos.
5. Comprender los mecanismos inmunológicos asociados a las principales patologías relacionadas con el funcionamiento lesivo del sistema inmune.
6. Orientar el diagnóstico de laboratorio y analizar el tratamiento actual de las principales patologías relacionadas con el funcionamiento lesivo del sistema inmune.
7. Analizar los factores que condicionan el tratamiento antimicrobiano y saber indicar una terapéutica antimicrobiana adecuada.
8. Conocer las medidas aplicables para prevenir los procesos infecciosos en nuestro medio.

Theoretical and Practical Contents

Master classes

I. INFECTION AND IMMUNE RESPONSE

Infection and infectious disease

Immune response to an infection

Vaccination and anti-infectious immunotherapy

II. DIAGNOSIS AND TREATMENT OF INFECTIONS

Microbiological basis for a diagnosis of infections

Criteria for the rational use of antibiotics

III. ETIOPATHOGENICS, DIAGNOSIS AND ANTIMICROBIAL TREATMENT OF INFECTIONS

Respiratory infections

Urinary tract infections

Cutaneous, subcutaneous, osteoarticular and muscular infections

Central nervous system infections

Sexually transmitted infections

Obstetric, congenital and perinatal infections

Bacteremia

Infections in an immunocompromised patient. Infections related to healthcare

Digestive tract infections

Zoonosis

IV. NEW INFECTIOUS CHALLENGES

The major infectious threats. Emerging infections

Infections in a globalized world. HIV, Plasmodium and Mycobacterium

Travelers' infections

Old and new challenges of resistance to antibiotics

• Seminars

• 1. Emerging/re-emerging pathogens (1) Dengue virus → dengue, (2) Leptospira spp → leptospirosis, (3) Crimean Congo virus→ Crimean - Congo hemorrhagic fever, (4) Monkeypox virus → mpox, (5) Ebola virus infection and (6) Leishmania spp. → leishmaniosis

• 2. Clinical Laboratory work. Clinical Microbiology Laboratory simulation

• Classroom practices

Clinical cases: Vaccine. Respiratory infections. Urinary tract infections. Sexually transmitted infections. Cutaneous, subcutaneous and osteoarticular infections. Digestive tract infections. Central nervous system infections

•Laboratory practical work

Indication and interpretation of complementary diagnosis studies on infections. Taking and processing of clinical samples for microbiological study. Evaluation, monitoring and follow-up of antibiotic therapy. Immunodiagnostics

TEACHING METHODS

The methodology will include Master Classes (28 classroom hours) in the form of an exhibition class; 12 hours of Classroom Practices where learning based on the resolution of problems and clinical cases, 20 hours of Laboratory Practices; and Seminars (6 classroom hours): Session 1, (3 hours) with completion and presentation of work on a selection of several emerging and reemerging pathogens and the diseases they cause and Session 2, (3 hours) of Practical Class in Clinical Laboratory where the student will come into contact with both the bases of the laboratory microbiological diagnosis and the reality of a clinical microbiology service.

TYPES OF TEACHING

Types of teaching	M	S	GA	GL	GO	GCL	TA	TI	GCA
Hours of face-to-face teaching	28	6	12	20					
Horas de Actividad No Presencial del Alumno/a	50	12	6	10					

Legend: M: Lecture-based

S: Seminar

GA: Applied classroom-based groups

GL: Applied laboratory-based groups

GO: Applied computer-based groups

GCL: Applied clinical-based groups

TA: Workshop

TI: Industrial workshop

GCA: Applied fieldwork groups

Evaluation methods

- End-of-course evaluation

Evaluation tools and percentages of final mark

- Multiple choice test 75%
- Exercises, cases or problem sets 15%
- Teamwork assignments (problem solving, Project design) 10%

ORDINARY EXAMINATION PERIOD: GUIDELINES AND OPTING OUT

1. Theoretical assessment: exam of 60 multiple-choice with one correct answer. Each correct answer = 1 point, and each wrong answer means that 0.3 points will be subtracted. Unanswered questions will not be penalized. Of the 60 questions, 48 are related to the subject taught in lectures, and they may include notions worked on in practical laboratory sessions. Twelve questions will be about clinical problems worked on and solved in the practical classroom sessions. This exam must be passed to pass the subject as a whole. The marks of the other assessments will not be added if this part of the assessment is no passed.

2. Practical assessment: questions based on images or tests with an overall weight of 15 points. For each incorrect answer one point is subtracted. This mark will be added to the total grade (only if the test is passed). Attendance is compulsory, and this percentage will not be added to the final mark if the student's absence is not sufficiently justified.

3. Furthermore, attendance, active participation, and the presentation and level of correctness of projects all contribute to the final mark. Practical classroom work accounts for 50% of this section and seminars 50% (Session 1, 40% and Session 2, 10%). Presentations (posters or oral) of both kinds of activity will be graded with a maximum 10 points to calculate the overall grade.

Attendance at all programmed activities is compulsory. A lack of active participation of non-compliance of rules will be penalized by subtracting 0.5 points per day of practical work. Failure to attend session 2 (Clinical Microbiology Laboratory simulation) will be penalized with the total value of that session.

If the student does not show up for assessments this will be considered as a withdrawal from the call and will appear as "Not presented".

Students may be assessed under the final assessment (exam) system, regardless of whether they have participated in the continuous assessment system or not. To do this, they should apply in writing to withdraw from continuous assessment within 9 weeks of the start of the term. In this case, they must sit a multiple-choice exam (only one answer correct) and a practical exam.

EXTRAORDINARY EXAMINATION PERIOD: GUIDELINES AND OPTING OUT

The extraordinary call is governed by the same criteria as the ordinary call. Students can request that they keep the grade obtained in the practical assessment or take a new exam, while maintaining the score obtained in the rest of the activities with continuous assessment.

If the student does not show up for the evaluations, it will be considered that he renounces the call and will appear as "Not submitted"

MANDATORY MATERIALS

Lab coat for laboratory practices. Sheets with practical procedures.

BIBLIOGRAPHY

Basic bibliography

1. Murray PR, Rosenthal KS, Pfaller MA (Eds.). Medical Microbiology. 9^a Ed., Elsevier, 2020.
2. Prats G. Microbiología y Parasitología médicas. Madrid, Editorial Médica Panamericana, 2019.
3. Basaras Ibarzabal M, Umaran Sánchez A. Mikrobiología medikoa. Bilbao, UPV/EHU, 2004.
4. Picazo JJ, Prieto J. Compendio de Microbiología médica. 2^a Edición. Barcelona, Elsevier, 2016.
5. Mensa J, Gatell JM, García-Sánchez JE, Letang E, López-Suñé E, Marco F. Guía de terapéutica antimicrobiana. Barcelona, Ed. Antares, 2023.

Detailed bibliography

1. Jorgensen JH, Pfaller MA, Carroll KC, Funke G, Landry ML, Richter SS, Warnock DW (Eds.). Manual of Clinical Microbiology, 11st Ed. Washington D.C., American Society for Microbiology, 2015.
2. Bennett JE, Dolin R, Blaser MJ (Eds.). Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases, 8th Edition. London, Churchill Livingstone-Elsevier, 2014.
3. Ausina V (Ed.). Tratado SEIMC de enfermedades infecciosas y Microbiología clínica. Madrid, Editorial Panamericana,

2006.

4. Quindós G. Micología clínica. Elsevier, Barcelona, 2015.

Journals

1. Enfermedades Infecciosas y Microbiología Clínica
2. Revista Española de Quimioterapia
3. Revista Iberoamericana de Micología
4. Medicina Clínica

Web sites of interest

1. Enfermedades Infecciosas y Microbiología Clínica <http://www.elsevier.es/es/revistas/enfermedades-infecciosas-microbiologia-clinica-28>
2. Protocolos de la Sociedad Española de Enfermedades Infecciosas y Microbiología Clínica, <http://www.seimc.org/protocolos/microbiologia>
3. Plan Nacional Resistencia Antibióticos (PRAN): <http://resistenciaantiboticos.es/es>
4. Guía terapéutica antimicrobiana del SNS. <https://resistenciaantiboticos.es/es/lineas-de-accion/control/guia-terapeutica-antimicrobiana-del-sns>
5. ProAntibióticos. ProAntibióticos: <https://proantibioticos.com/about/>
6. Osakidetza / Osanet. <http://www.osakidetza.euskadi.eus/r85-pkfarm02/es/conte>
7. Organización Mundial de la Salud <http://www.who.int/>
8. European Centre for Disease Prevention and Control (ECDC) <http://ecdc.europa.eu/en/Pages/home.aspx>
9. Centers for Disease Control and Prevention (CDC) <https://www.cdc.gov/>

OBSERVATIONS

COURSE GUIDE 2023/24

Faculty 327 - Faculty of Medicine and Nursing
Degree GMEDIC30 - Bachelor`s Degree in Medicine

Cycle .
Year Third year

COURSE

27277 - Foundations of Medical Pharmacology

Credits, ECTS: 6

COURSE DESCRIPTION

Basis of Medical Pharmacology is a core subject in the 3rd year of the Degree in Medicine. This subject belongs to Unit 04 "Diagnostic and Therapeutic Procedures". The main objective of this subject is that the students learn the following aspects:

- a) Concepts and general mechanisms underlying drug action as well as its absorption, distribution, metabolism and excretion.
- b) Pharmacological effects of main drugs and their therapeutic use in pathological processes, based on their mechanism of action and their pharmacokinetics. The contents are divided in the following blocks:
 - a. Autonomic nervous system pharmacology
 - b. Central nervous system pharmacology and pharmacological basis of anesthesia
 - c. Pharmacology of analgesic, anti-inflammatory e immunomodulatory drugs
 - d. Pharmacology of digestive, respiratory and cardiovascular systems
 - e. Hormone pharmacology
 - f. Antimicrobial, antiprotozoal, anthelmintic and anti-cancer pharmacology

COMPETENCIES/LEARNING RESULTS FOR THE SUBJECT

Approved by ANECA.

Theoretical and Practical Contents

Block I. General concepts and mechanisms involved in drug action and absorption, distribution, metabolism and excretion processes.

- Topic 1. Introduction to Pharmacology
 - Topic 2. Absorption of drugs. Distribution of drugs in the body
 - Topic 3. Metabolism and drug excretion
 - Topic 4. Pharmacokinetic parameters
 - Topic 5. Pharmacodynamics I
 - Topic 6. Pharmacodynamics II
 - Topic 7. General mechanisms of adverse reactions to drugs
- Block II. Pharmacology of the autonomic and peripheral nervous system
- Topic 8. Autonomic nervous system. Adrenergic neurotransmission. Cholinergic neurotransmission
 - Topic 9. Adrenergic drugs. Centrally acting antiadrenergics
 - Topic 10. Antiadrenergic drugs
 - Topic 11. Cholinergic drugs. Muscarinic antagonists. Neuromuscular blockers

Block III. Pharmacology of the central nervous system and pharmacological bases of anesthesia

- Topic 12. Opiate analgesics
- Topic 13. Benzodiazepines. Other anxiolytics. Other sedative and hypnotics
- Topic 14. Antidepressant drugs. Antimanic drugs
- Topic 15. Antipsychotic drugs. Psychostimulants. Psychotomimetics
- Topic 16. Drugs used at neurodegenerative disorders. Antiepileptic drugs. Antispastic drugs
- Topic 17. General anesthetic drugs: inhalational and intravenous. Local anesthetics

Block IV. Analgesic, anti-inflammatory and immunomodulatory drugs.

- Topic 18. Histamine and antihistamine drugs. Serotonin. Eicosanoids
 - Topic 19-20. Nonsteroidal anti-inflammatory drugs (NSAIDs). Other antirheumatics. Antigout agents
 - Topic 21. Steroidal anti-inflammatory drugs.
 - Topic 22. Immunosuppressive and immunostimulant drugs
- Block V. Pharmacology of the digestive, respiratory and cardiovascular systems.
- Topic 23-24. Pharmacology of the respiratory and digestive tract
 - Topic 25. Diuretics
 - Topic 26. Digitalics. Other inotropic drugs. Calcium antagonists
 - Topic 27. Pharmacology of the renin-angiotensin system
 - Topic 28. Nitrates and other vasodilator drugs. Antiarrhythmic drugs
 - Topic 29. Anticoagulants. Platelet antiaggregants. Pharmacology of fibrinolysis
 - Topic 30. Hypolipidemic drugs. Hematopoietic agents
- Block VI. Pharmacology of antimicrobials, antiprotozoals, anthelmintics and anticancer drugs
- Topic 31. Antiseptic and disinfectants. Sulfamides and cotrimoxazol. Quinolones. Other urinary antiseptics

Topic 32. Beta-lactam antibiotics
Topic 33. Aminoglycoside antibiotics. Polypeptide antibiotics. Tetracyclines
Topic 34. Macrolides. Other antibiotics. Antimycobacterial drugs
Topic 35. Antifungal drugs. Antiviral drugs
Topic 36. Antiprotozoal, antihelmintic and ectoparasiticide drugs
Topic 37. Antineoplastic drugs
Block VII. Pharmacology of hormones and metabolism
Topic 38. Hormones of the pituitary gland. Thyroxine and antithyroid drugs
Topic 39. Pharmacology of the adrenal cortex. Insulin and oral hypoglycemic drugs. Glucagon
Topic 40. Female and male sex hormones
Topic 41. Ossification pharmacology

4.2. Practical content

The practical content in the subject is spread over 10 practical sessions in the classroom, 2 computer practical session and 2 laboratory practical sessions and 1 seminar.

TEACHING METHODS

Master classes and practical sessions (10 practical sessions in the classroom, 2 computer practical session and 2 laboratory practical sessions and 1 seminar).

TYPES OF TEACHING

Types of teaching	M	S	GA	GL	GO	GCL	TA	TI	GCA
Hours of face-to-face teaching	33	2	20	5	4				
Horas de Actividad No Presencial del Alumno/a	62	8	10	4	2				

Legend: M: Lecture-based S: Seminar GA: Applied classroom-based groups
GL: Applied laboratory-based groups GO: Applied computer-based groups GCL: Applied clinical-based groups
TA: Workshop TI: Industrial workshop GCA: Applied fieldwork groups

Evaluation methods

- End-of-course evaluation

Evaluation tools and percentages of final mark

- Written test, open questions 54%
- Multiple choice test 21%
- Exercises, cases or problem sets 12%
- Teamwork assignments (problem solving, Project design) 13%

ORDINARY EXAMINATION PERIOD: GUIDELINES AND OPTING OUT

According to approved official calendar.

EXTRAORDINARY EXAMINATION PERIOD: GUIDELINES AND OPTING OUT

According to approved official calendar.

MANDATORY MATERIALS

BIBLIOGRAPHY

Basic bibliography

Rang HP, Dale MM, Ritter JM, Flower RJ, Henderson G. "Rang and Dale's Pharmacology" 9th ed. Elsevier.

Detailed bibliography

Brunton L, Chabner B, Knollman B (Eds). Goodman & Gilman's "The Pharmacological Basis of Therapeutics", 13th ed. McGraw-Hill.

Journals

Drugs
Clinical Pharmacology and Therapeutics
Clinical Pharmacokinetic
British Journal Clinical Pharmacology

Web sites of interest

http://www.osakidetza.euskadi.eus/r85-ckpubl02/es/contenidos/informacion/publicaciones_informes_estudio/es_pub/publicaciones.html#farmacia

<https://www.aemps.gob.es>

<http://www.ema.europa.eu/ema/>

OBSERVATIONS

Ordinary call

The assessment system is mixed:

Written theoretical assessment

Instrument: final written exam is divided in 2 parts. Each one consists of: 5 questions with short answers and 30 multiple choice questions. Each of the 4 parts must be passed.

Assessment criteria: information provided, reasoning, ability to summarize and precision in the use of language.

Percentage of the final grade: 75 %

Practical assessment

Instrument: final practical work report (classroom and computer) and active participation in classroom practical work sessions. Students must attend and participate in a minimum of 80% of the practical sessions.

Assessment criteria: identification of the objectives proposed, information contained, ability to analyze and solve the issues presented correctly.

Percentage of the final grade: 25 %

Extraordinary call

The extraordinary call is governed by course regulation.

OBSERVATIONS

During the development of the exam, the use of books, notes, telephone, electronic devices or computers will not be allowed. If calculator is needed, students will be notified in advance.

COURSE GUIDE 2023/24

Faculty 352 - Faculty of Medicine and Nursing

Cycle .

Degree GENFER30 - Bachelor's Degree in Nursing

Year Third year

COURSE

27562 - Assessment of the Habits of Life of a Population

Credits, ECTS: 4,5

COURSE DESCRIPTION

DESCRIPTION AND CONTEXTUALIZATION OF THE SUBJECT

Given the prevalence of chronic diseases in developed countries, the aim of this subject is to study in depth the risk factors of these diseases, learning to assess them, as well as their impact on the health of different population groups.

COMPETENCIES/LEARNING RESULTS FOR THE SUBJECT

COMPETENCIES / LEARNING OUTCOMES OF THE SUBJECT

General Competencies: 148, 153

- GC 148: Promote healthy lifestyles, self-care, supporting the maintenance of preventive and therapeutic behaviours.
- GC 153: Establish evaluation mechanisms, considering scientific-technical and quality aspects.

Specific skills: 75, 77, 87

- SC 75: Know and assess the nutritional needs of healthy people and those with health problems throughout the life cycle, in order to promote and reinforce healthy eating habits.
- SC 77: Learn the pathophysiological processes and their manifestations and the risk factors that determine the states of health and disease in the different stages of the life cycle.
- SC 87: Identify the factors related to health and the problems of the environment, in order to attend to people in situations of health and illness as members of a community. Apply the necessary methods and procedures in their field to identify the most relevant health problems in a community.

Cross-cutting skills: Effective oral communication.

Learning Outcomes: To develop the necessary skills to detect and prevent unhealthy lifestyle habits in the population.

Know the necessary tools to identify social habits. Properly apply the instruments available to correct the defects detected.

Theoretical and Practical Contents

THEORETICAL-PRACTICAL CONTENTS

UNIT 1. Methods for the assessment of physical activity and nutrition.

Unit 1.1. General introduction to methods of habits assessment.

Unit 1.2. Methods to assess physical activity.

Unit 1.3. Methods for assessing dietary habits.

UNIT 2. Effect of lifestyle habits on the health of the population to be studied.

Unit 2.1. Main causes of morbidity and mortality and risk factors for the most prevalent diseases (cardiovascular, oncological, mental illnesses, etc.).

Unit 2.2. Physical activity recommendations in different population groups.

Unit 2.3. Dietary recommendations in different population groups.

UNIT 3. Lifestyles of the population.

Unit 3.1. Physical activity habits in different population groups.

Unit 3.2. Eating habits in different population groups.

TEACHING METHODS

METHODOLOGY

1.- Seminar work and laboratory practicals: group work.

2.- Oral presentation of written work

3.- Examination

Assignments must be submitted on the date and in the format indicated by each teacher. In order to pass the course, it will be necessary to have passed 50% of each of the parts. Those who do not participate in the classes will be entitled to a final exam.

TYPES OF TEACHING

Types of teaching	M	S	GA	GL	GO	GCL	TA	TI	GCA
Hours of face-to-face teaching	38	4		3					
Horas de Actividad No Presencial del Alumno/a	57	6		4,5					

Legend: M: Lecture-based S: Seminar GA: Applied classroom-based groups
 GL: Applied laboratory-based groups GO: Applied computer-based groups GCL: Applied clinical-based groups
 TA: Workshop TI: Industrial workshop GCA: Applied fieldwork groups

Evaluation methods

- End-of-course evaluation

Evaluation tools and percentages of final mark

- Written test, open questions 70%
- Oral defence 10%
- Teamwork assignments (problem solving, Project design) 20%

ORDINARY EXAMINATION PERIOD: GUIDELINES AND OPTING OUT

ORDINARY ASSESSMENT SESSION: GUIDELINES AND OPTING OUT

Assessment System:

Skills and qualification (%).

- 1.- S. and LP work. SC: 75, 77, 87 (20%)
- 2.- Oral presentation of the written work. TC (10%)
- 3.- Examination. SC: 75, 77, 87 (70%)

EXTRAORDINARY EXAMINATION PERIOD: GUIDELINES AND OPTING OUT

EXTRAORDINARY EXAMS: ORIENTATIONS

The assessment of the subjects in the extraordinary exams will be carried out exclusively through the final assessment system. The final assessment test of the extraordinary exam will consist of the assessment tests that are necessary to evaluate and measure the defined learning outcomes, in a similar way to how they were assessed in the ordinary call. The passing grades obtained by students during the course may be maintained.

MANDATORY MATERIALS

COMPULSORY MATERIALS

Articles, methods and resources described in classes, seminars and classroom practice. Material will be available on the E-GELA platform.

BIBLIOGRAPHY

Basic bibliography

- Caspersen C., Powerl K. & Christenson G. (1985). Physical activity, exercise, and physical fitness: Definitions and distinctions for health-related research. Pub Health Rep, 100, 126-131.
- Ainsworth et al. (2000). Compendium of physical activities: an update of activity codes and MET intensities. Med Sci Sports Exercise 32, 498-516.
- Livingstone MBE (2003). How active are we? Levels of routine physical activity in children and adults. Proc Nutr Soc 62, 681-701.
- al. (1983). A method to assess energy expenditure in children and adults. Am J Clin Nutr 37, 461-467
- López, J. & Fernández, A. (2008). Fisiología clínica del ejercicio. Editorial Médica Panamericana, Buenos Aires.
- Marshall & Welk (2008). Definitions and measurement. En Smith A. & Biddle S. editores, Youth physical activity and sedentary behavior (pp. 3-29). Champaign Illinois: Human kinetics Publishers.
- MEC/MSC Ministerio de Educación y Ciencia y Ministerio de Sanidad y Consumo (2006). Actividad física y salud en la Infancia y la Adolescencia. Ministerio de Educación y Ciencia y Ministerio de Sanidad y Consumo. Madrid.

Sarah M. Eickmeyer, Gail L. Gamble, Samman Shahpar, Kim D. Do (2012). The Role and Efficacy of Exercise in Persons With CancerPM R ;4:874-881.Sheri r. Colberg, ronald j. Sigal, bo fernhall, judith g. Regensteiner, bryan j. Blissmer, richard r. Rubin, lisa chasan-taber, ann l. Albright, barry braun (2010). Exercise and Type 2 Diabetes. The American College of Sports Medicine and the American Diabetes Association: joint position statement. Diabetes Care 33:e147-e167.

Warburton, D.E., Nicol, C.W. & Bredin, S.S. (2006), "Health benefits of physical activity: the evidence", CMAJ: Canadian Medical Association journal = journal de l'Association medicale canadienne, vol. 174, no. 6, pp. 801-809.

Gary O'Donovan , Anthony J. Blazevich , Colin Boreham , Ashley R. Cooper , Helen Crank , Ulf Ekelund , Kenneth R. Fox , Paul Gately , Billie Giles-Corti , Jason M. R. Gill , Mark Hamer , Ian McDermott , Marie Murphy , Nanette Mutrie , John J. Reilly , John M. Saxton & Emmanuel Stamatakis (2010): The ABC of Physical Activity for Health: A consensus statement from the British Association of Sport and Exercise Sciences, Journal of Sports Sciences, 28:6, 573-591. William Micheo,

Luis Baerga, Gerardo Miranda (2012). Basic Principles Regarding Strength, Flexibility, and Stability Exercises PM R;4:805-811.

González-Gross M, Ruiz JR, Moreno LA, Rufino-Rivas P, Garaulet M, Mesana MI, Gutiérrez A.(2003). The AVENA Group. Body composition and physical performance of Spanish adolescents: the AVENA pilot study. *Acta Diabetol*, 40: 299-301

Rikli, R.E. & Jones, J.C. (2001). Senior fitness test manual, Human Kinetics, Champaign, Illinois.

Tinetti ME, Williams TF, Mayewski R.(1986). Falls risk index for elderly patients base don Lumber of chronic disabilities. *Am J Med*. 80: 429-34

Detailed bibliography

BIBLIOGRAPHY FOR FURTHER READING

It will be provided in the presentation of the course.

Journals

It will be provided in the course presentation.

Web sites of interest

Internet-eko web-gune interesgarriak

www.patient.co.uk/health/Physical-Activity-For-Health.htm.

OBSERVATIONS

COURSE GUIDE 2023/24

Faculty 352 - Faculty of Medicine and Nursing
Degree GENFER30 - Bachelor's Degree in Nursing

Cycle .

Year Second year

COURSE

27568 - Placement I

Credits, ECTS: 12

COURSE DESCRIPTION

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".

COMPETENCIES/LEARNING RESULTS FOR THE SUBJECT

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.

Theoretical and Practical Contents

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.

TEACHING METHODS

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 praticum 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.

TYPES OF TEACHING

Legend: M: Lecture-based S: Seminar GA: Applied classroom-based groups
GL: Applied laboratory-based groups GO: Applied computer-based groups GCL: Applied clinical-based groups
TA: Workshop TI: Industrial workshop GCA: Applied fieldwork groups

Evaluation methods

- #### - End-of-course evaluation

Evaluation tools and percentages of final mark

- Calificación correspondiente a la realización de las prácticas (Guía de Evaluación por Competencias). Cada estudiante llevará a cabo una tarea asociada a su periodo de prácticas clínicas, que conllevará una pequeña reflexión sobre la práctica clínica desempeñada y que se evaluará en modo Apto/No Apto. Dicha tarea conllevará trabajo individual y/o trabajo en equipo. Si el/la estudiante no obtiene la calificación de apto la asignatura estará suspendida.

ORDINARY EXAMINATION PERIOD: GUIDELINES AND OPTING OUT

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.

The subject's competency assessment guide is available on the website:

<https://www.ehu.eus/documents/10043056/12579363/Guia-evaluacion-2curso-Practicum-I.pdf/03ec1e4b-28a3-f18a-7437-46acec085851?t=1627365866371>

EXTRAORDINARY EXAMINATION PERIOD: GUIDELINES AND OPTING OUT

Extraordinary evaluation session: information and course dropping.-

None.

MANDATORY MATERIALS

Links.-

<https://egela.ehu.es/> Curso: Practicum I
<http://gestion.ehu.es/gaur>
<https://www.ehu.eus/es/web/enfermeria-leioa/praktika-klinikoak>

BIBLIOGRAPHY

Basic bibliography

- MARTÍNEZ MARTÍN ML, CHAMORRO REBOLLO E. Historia de la Enfermería. Evolución histórica del cuidado enfermero. 2^a edición. Barcelona: Elsevier; 2011.
- DONAHUE P. Historia de la Enfermería. Barcelona: Ediciones Doyma; 1985.
- ALLIGOOD MR. Modelos y teorías en enfermería. 8^a edición. Barcelona: Elsevier España; 2015.
- KOZIER B, ERB G. Fundamentos de Enfermería. Conceptos, proceso y práctica. 7^o Edición. Madrid: Interamericana; 2005.
- POTTER P. Fundamentos de Enfermería. Teoría y práctica. 5^o Edición. Madrid: Ed. Mosby-Doyma; 2001.
- LEAL COSTA C, CARRASCO GUIRAO JJ (Coords.) Fundamentos de Enfermería: cuidados básicos centrados en las necesidades de la persona. Murcia: Diego Marín Librero-Editor; 2010.
- BELLIDO VALLEJO JC, LENDINEZ COBO JF. Proceso Enfermero desde el modelo de cuidados de Virginia Henderson y los lenguajes NNN. Jaén: Ilstre Colegio Oficial de Enfermería de Jaén; 2010.
- ALFARO LEFEVRE R. Pensamiento crítico y juicio clínico en Enfermería. 4^a Edición. Madrid: Elsevier- Masson; 2009.

Detailed bibliography

- GONZÁLEZ JL. Historia de la enfermería. Madrid: Ediciones DAE; 2011.
- GARCÍA C, MARTÍNEZ ML. Historia de la Enfermería. Evolución Histórica del Cuidado Enfermero. Madrid: Ediciones Harcourt; 2001.
- SELLÁN SOTO MC. La Profesión va por dentro. Elementos para una historia de la Enfermería Española contemporánea. 2^a Edición. Madrid: FUDEN; 2010.
- BENAVENT GARCÉS MA, FERRES FERRANDIS E, FRANCISCO DEL REY C. Colección Enfermería 21: Fundamentos de enfermería. 2^a Edición. Madrid: Difusión Avances de Enfermería (DAE); 2009.
- HENDERSON V. La naturaleza de la Enfermería. Reflexiones 25 años después. Madrid: Interamericana- Mc Graw-Hill; 1994.
- LUIS RODRIGO MT, FERNÁNDEZ FERRÍN C, NAVARRO GÓMEZ MV. De la teoría a la práctica. El pensamiento de Virginia Henderson en el siglo XXI. 2^a Edición. Barcelona: Ed. Masson; 2000.
- OREM DE. Modelo de Orem: conceptos de enfermería en la práctica. Barcelona: Editorial. Ediciones Científicas y Técnicas; 1993.

Journals

- Nursing Education in Practice
- Nursing Education Today

Web sites of interest

- Nursing Education in Practice
- Nursing Education Today

OBSERVATIONS