

Escuela Politécnica

Goi Eskola Politeknikoa | Mondragon Unibertsitatea

Course: 2022 / 2023 - Course planning

[GBE104] GENERAL PATHOLOGY

Studies DEGREE IN BIOMEDICAL ENGINEERING Subject Health Sciences

Course 3 Mention / Field of specialisation Character COMPULSORY

Plan 2017

Modality Adapted Language EUSKARA Face-to-face

Credits 6 Hours/week 5.22 Total hours 94 class hours + 56 non-class hours = 150 total

hours

PROFESSORS

AZPI-MENDIZABAL, LEIRE

REQUIRED PREVIOUS KNOWLEDGE

Subjects Knowledge

HUMAN ANATOMY (No previous knowledge required)

PHYSIOLOGY

SKILLS

VERIFICA SKILLS

SPECIFIC

GBCE27 - To know and understand the fundamentals of various pathologies

GBCG3 - To build on basic concepts and technologies to expand knowledge of new theories and methods, and to acquire flexibility to adapt to new situations.

GBCTR2 - To be able to do their job in cooperative, participatory environments, with awareness of social responsibility.

G_CB2 - To be able to apply knowledge to occupational or professional tasks; have the necessary skills to pose and defend arguments, and to solve problems within their field of study

LEARNING RESULTS

RG301 Assumes responsibilities in the work team, organizing and planning the tasks to be developed, facing the contingencies and encouraging the participation of its members.

NCH TH LEARNING ACTIVITIES СН

Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams

w **MAKE-UP MECHANISMS EVALUATION SYSTEM**

Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory

exercises, term projects, challenges and problems

100% (No mechanisms)

CH - Class hours: 4 h. NCH - Non-class hours: 2 h. TH - Total hours: 6 h.

RG302 Analyze the intervening variables in the problem and propose actions for a stable situation.

NCH СН TH **LEARNING ACTIVITIES**

Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams

EVALUATION SYSTEM W **MAKE-UP MECHANISMS**

Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory

(No mechanisms)

3 h.

4 h.

6 h

5 h

2 h.

2 h.

100%

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exercises, term projects, challenges and problems

CH - Class hours: 3 h. NCH - Non-class hours: 2 h. TH - Total hours: 5 h.

RG304 Define the problem, develop the solution and present the conclusions in a efficient manner, arguing and justifying each one of them in writing.

 LEARNING ACTIVITIES
 CH
 NCH
 TH

 Development and writing of records, reports, presentations, audiovisual material, etc. on
 4 h.
 2 h.
 6 h.

100%

Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams

EVALUATION SYSTEM W MAKE-UP MECHANISMS

Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems

(No mechanisms)

CH - Class hours: 4 h. NCH - Non-class hours: 2 h. TH - Total hours: 6 h.

Re305 Define the problem, develop the solution and present the conclusions in a efficient manner, arguing and justifying each one of them in spoken form.

LEARNING ACTIVITIES CH NCH TH

100%

Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams

EVALUATION SYSTEM W MAKE-UP MECHANISMS

Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems

(No mechanisms)

4 h.

2 h.

6 h.

CH - Class hours: 4 h. NCH - Non-class hours: 2 h. TH - Total hours: 6 h.

RGB315 [!] Conoce y comprende las causas y mecanismos de la lesión y muerte celular

LEARNING ACTIVITIES	СН	NCH	TH
Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams	8 h.	4 h.	12 h.
Conducting tests, giving presentations, presenting defences, taking examinations and/or do checkpoints	ing	7,25 h.	7,25 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	15 h.		15 h.
Tutoring sessions and monitoring of training activities		3 h.	3 h.

EVALUATION SYSTEM W MAKE-UP MECHANISMS

Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory

Individual written and oral tests to assess technical skills of the subject

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exercises, term projects, challenges and problems

Individual written and/or oral tests or individual

coding/programming tests

70%

CH - Class hours: 23 h.

NCH - Non-class hours: 14,25 h. TH - Total hours: 37,25 h.

RGB316 [!] Conoce las diferentes patologías y trastornos, y es capaz de clasificarlos en base a diferentes parámetros

LEARNING ACTIVITIES			СН	NCH	TH
Development and writing of records, reports, presentation projects/work experience/challenges/case studies/experindividually and/or in teams			14 h.	6 h.	20 h.
Conducting tests, giving presentations, presenting defencheckpoints	ices, taking	examinations and/or doi	ng	7,5 h.	7,5 h.
Presentation by the teacher in the classroom, in participa procedures associated with the subjects	atory classe	es, of concepts and	26 h.		26 h.
Tutoring sessions and monitoring of training activities				10 h.	10 h.
EVALUATION SYSTEM	W	MAKE-UP MECHANI	ISMS		
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	30%	Individual written and subject	oral tests to	assess technic	al skills of the
Individual written and/or oral tests or individual coding/programming tests	70%				

RGB317 [!] Conoce los principios básicos de la inmunopatología

LEARNING ACTIVITIES			СН	NCH	TH
Development and writing of records, reports, presentation projects/work experience/challenges/case studies/experiendividually and/or in teams			5 h.	3 h.	8 h.
Presentation by the teacher in the classroom, in participal procedures associated with the subjects	atory classe	es, of concepts and	3 h.		3 h.
Carrying out exercises and solving problems individually and/or in teams		8 h.	7,25 h.	15,25 h.	
EVALUATION SYSTEM	W	MAKE-UP MECHAN	IISMS		
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	27%	Individual written and subject	d oral tests to	assess technic	al skills of the
Individual written and/or oral tests or individual	73%				

CH - Class hours: 16 h. NCH - Non-class hours: 10,25 h. TH - Total hours: 26,25 h.

coding/programming tests

CONTENTS

SECTION 1: Basics

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- The concept of disease
- Agents that cause the disease.
- Biology and cell (injury and cell death)
- Molecular pathology
SECTION 2: Pathophysiology
- Pathophysiology of fever
- Pathophysiology of inflammation
- Pathophysiology of edema
SECTION 3: Diseases - Heart disease
- Digestive disorders - Diseases of the nervous system
- Complex diseases
SECTION 4: Tumor Pathology
- Basic concepts - Molecular basis
- Angiogenesis and metastasis
- Hereditary cancer

LEARNING RESOURCES AND BIBLIOGRAPHY

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Learning resources	Bibliography
Moodle Platform	Sisinio de Castro. Manual de Patología General. Pérez Arellano, J.L.
Subject notes	Ed. Elsevier Masson, 7ª edición, 2013.
Class presentations	Robbins y Cotran. Patología estructural y funcional. Kumar, Abbas & Aster. Ed. Elsevier Masson, 9 ^a ed. 2017.