

[GBE202] HUMAN ANATOMY AND PHYSIOLOGY I

GENERAL INFORMATION

Studies	DEGREE IN BIOMEDICAL ENGINEERING		Subject	HEALTH SCIENCES
Semester	1	Course	2	Mention / Field of specialisation
Character	BASIC TRAINING		Language	CASTELLANO
Plan	2022	Modality	Face-to-face	Total hours
Credits	6	Hours/week	5.19	93.5 class hours + 56.5 non-class hours = 150 total hours

PROFESSORS

AZPI-EGUIZABAL ARGAIZ, CRISTINA

AZPI-SANTOS CABRERA, SILVIA

REQUIRED PREVIOUS KNOWLEDGE

Subjects	Knowledge
(No specific previous subjects required)	(No previous knowledge required)

LEARNING RESULTS

LEARNING RESULTS	KC	SK	AB	ECTS
GBR201 - To apply the concepts of human anatomy and physiology of the different devices to problems in the field of Biomedical Engineering	x		x	5,4
G-RTR1 - To develop interdisciplinary projects specific to their specialty and of gradual complexity, - becoming aware of respect for human rights and fundamental rights, and analyzing and assessing the impact of the proposed solutions on the SDGs - to acquire and/or apply basic, advanced and /or avant-garde, demonstrating the ability to work in multidisciplinary teams and/or undertake further studies with a high degree of autonomy		x		0,32
G-RTR2 - To express information, ideas and the arguments that support them in an orderly, clear and coherent manner, orally and in writing, based on quality information, self-made or obtained from different sources, using inclusive and non-discriminatory language		x		0,28

Total: 6

KC: Knowledge or Content / SK: Skills / AB: Abilities

SECONDARY LEARNING RESULTS

RGB290 [!] *Proponer los objetivos y la planificación de un proyecto que le permita adquirir y/o reforzar los conocimientos de tecnologías propias de su especialidad,- que en ocasiones llegan a la vanguardia del conocimiento- y definir una estrategia de aprendiz*

LEARNING ACTIVITIES

	CH	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	2,5 h.	1,5 h.	4 h.

EVALUATION SYSTEM

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

W

100%

MAKE-UP MECHANISMS

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

Observation (technical capacity, attitude and participation)

CH - Class hours: 2,5 h.

NCH - Non-class hours: 1,5 h.

TH - Total hours: 4 h.

RGB291 [!] *Establecer las responsabilidades de los miembros del equipo utilizando técnicas adecuadas para fomentar la eficiencia del equipo para el desarrollo del proyecto en los plazos establecidos (compartir recursos, aportar ideas, habilidades comunicativas*

LEARNING ACTIVITIES

	CH	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	2,5 h.	1,5 h.	4 h.

EVALUATION SYSTEM	W	MAKE-UP MECHANISMS
Self-assessment	25%	Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems Observation (technical capacity, attitude and participation)
Co-assessment	25%	
Observation (technical capacity, attitude and participation)	50%	
<p>CH - Class hours: 2,5 h. NCH - Non-class hours: 1,5 h. TH - Total hours: 4 h.</p>		

RGB293 [!] *Redacta y estructura correctamente la memoria del proyecto, haciendo un uso correcto, inclusivo y no discriminatorio del lenguaje. Para ello, busca y hace uso de las fuentes de información adecuadas.*

LEARNING ACTIVITIES	CH	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	2,5 h.	1,5 h.	4 h.
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	100%	Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems Observation (technical capacity, attitude and participation)	
<p>CH - Class hours: 2,5 h. NCH - Non-class hours: 1,5 h. TH - Total hours: 4 h.</p>			

RGB294 [!] *Realiza una presentación oral del proyecto con argumentos elaborados por sí mismos y haciendo un uso correcto, inclusivo y no discriminatorio del lenguaje.*

LEARNING ACTIVITIES	CH	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	2 h.	1 h.	3 h.
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	100%	Observation (technical capacity, attitude and participation)	
<p>CH - Class hours: 2 h. NCH - Non-class hours: 1 h. TH - Total hours: 3 h.</p>			

RGB201 [!] *Describe la anatomía general de los diferentes aparatos del cuerpo humano, siendo capaz de identificar y conocer los diferentes elementos que constituyen dichos sistemas*

LEARNING ACTIVITIES	CH	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	9 h.	6 h.	15 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	26 h.	16 h.	42 h.

Carrying out exercises and solving problems individually and/or in teams		7 h.	3,5 h.	10,5 h.
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	20%	Individual written and/or oral tests or individual coding/programming tests		
Individual written and/or oral tests or individual coding/programming tests	80%			
CH - Class hours: 42 h.				
NCH - Non-class hours: 25,5 h.				
TH - Total hours: 67,5 h.				

RGB202 [!] *Describe la fisiología general de los diferentes aparatos del cuerpo humano, siendo capaz de conocer el funcionamiento de dichos sistemas*

LEARNING ACTIVITIES	CH	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	9 h.	6 h.	15 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	26 h.	16 h.	42 h.
Carrying out exercises and solving problems individually and/or in teams	7 h.	3,5 h.	10,5 h.
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	20%	Individual written and/or oral tests or individual coding/programming tests	
Individual written and/or oral tests or individual coding/programming tests	80%		
CH - Class hours: 42 h.			
NCH - Non-class hours: 25,5 h.			
TH - Total hours: 67,5 h.			

CONTENTS

1. Locomotor Apparatus
2. Respiratory System
3. Digestive System
4. Urinary System
5. Reproductive System
6. Cardiovascular System
7. Hematopoietic System

LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources	Bibliography
Lab practical training	Michael Schünke, Erik Schulte, Udo Schumacher. Colección Prometheus. Texto y Atlas Anatomía
Topic related web quires	Guyton y Hall. Tratado de fisiología médica
Class presentations	Patton Thibodeau. Anatomía y fisiología (8ªed.)
Video projections	http://katalogoa.mondragon.edu/janium-bin/janium_login_opac_re_in_k.pl?grupo=BIOMEDIKOA21&ejecuta=5&_ST

