

## [GBU201] METHODOLOGICAL FOUNDATIONS

### GENERAL INFORMATION

<b>Studies</b>	DEGREE IN BIOMEDICAL ENGINEERING		<b>Subject</b>	BIOMEDICAL PROJECTS
<b>Semester</b>	1	<b>Course</b>	1	<b>Mention / Field of specialisation</b>
<b>Character</b>	COMPULSORY		<b>Language</b>	EUSKARA
<b>Plan</b>	2022	<b>Modality</b>	Face-to-face	<b>Total hours</b>
<b>Credits</b>	6	<b>Hours/week</b>	5.19	93.5 class hours + 56.5 non-class hours = <b>150 total hours</b>

### PROFESSORS

AGINAGALDE UNANUE, MAIALEN

### REQUIRED PREVIOUS KNOWLEDGE

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

### LEARNING RESULTS

LEARNING RESULTS	KC	SK	AB	ECTS
<b>G-RTR1</b> - 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		3,92
<b>G-RTR2</b> - 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		2,08
<b>Total:</b>				<b>6</b>

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

### SECONDARY LEARNING RESULTS

**RGB190** [!] *Conocer y aplicar las fases para desarrollar de forma guiada, con los objetivos y la planificación previamente definidos, un proyecto de complejidad técnica acorde con los conocimientos de formación básica de la ingeniería. Reflexiona sobre los cono*

#### 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	21,5 h.	16,5 h.	38 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	6 h.		6 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:** 27,5 h.

**NCH - Non-class hours:** 16,5 h.

**TH - Total hours:** 44 h.

**RGB191** [!] *Contribuir en la estrategia de funcionamiento del equipo priorizando los objetivos comunes, fomentando y valorando la participación de todas las personas y responsabilizándose de las tareas individuales, así como del cumplimiento de plazos.*

#### LEARNING ACTIVITIES

	CH	NCH	TH
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	8 h.		8 h.
Carrying out exercises and solving problems individually and/or in teams	4 h.	3 h.	7 h.

Seminars, debates and/or workshops to deepen and/or share experiences.	4 h.		4 h.
Concept mapping	4 h.	9 h.	13 h.

**EVALUATION SYSTEM**

**W**

Self-assessment	12,5%
Co-assessment	12,5%
Concept maps / Diagrams	50%
Observation (technical capacity, attitude and participation)	25%

**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:** 20 h.  
**NCH - Non-class hours:** 12 h.  
**TH - Total hours:** 32 h.

**RGB192** [!] *Conoce y describe las fases para desarrollar los equipos de su ingeniería, e identifica y describe las funciones profesionales de un ingeniero, tomando conciencia de la contribución al logro de los objetivos de desarrollo sostenible (ODS)*

**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	8 h.	8 h.	16 h.
Personal study and flexible development of concepts and subjects using active dynamics, to foster more meaningful learning	6 h.		6 h.

**EVALUATION SYSTEM**

**W**

Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	50%
Concept maps / Diagrams	50%

**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:** 14 h.  
**NCH - Non-class hours:** 8 h.  
**TH - Total hours:** 22 h.

**RGB193** [!] *Redacta una memoria de proyecto clara y concisa utilizando las fuentes de información y estructura de memoria facilitadas, 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	10 h.	10 h.	20 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	6 h.		6 h.

**EVALUATION SYSTEM**

**W**

Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	100%
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**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:** 16 h.  
**NCH - Non-class hours:** 10 h.  
**TH - Total hours:** 26 h.

**RGB194** [!] *Realiza una presentación oral y defensa del proyecto clara y concisa, haciendo uso correcto, inclusivo y no discriminatorio del lenguaje.*

<b>LEARNING ACTIVITIES</b>		<b>CH</b>	<b>NCH</b>	<b>TH</b>
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		12 h.	10 h.	22 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects		4 h.		4 h.
<b>EVALUATION SYSTEM</b>	<b>W</b>	<b>MAKE-UP MECHANISMS</b>		
Presentation and defence of exercises, case studies, computer practical work, simulation practical work, laboratory practical work, term projects, end of degree project, master's thesis, challenges and problems	100%	Observation (technical capacity, attitude and participation)		
<b>CH - Class hours:</b> 16 h. <b>NCH - Non-class hours:</b> 10 h. <b>TH - Total hours:</b> 26 h.				

## CONTENTS

• Mentoring program

• Teamwork

• Learn to learn

• Written documentation

• Oral presentation

• PBL Methodology

• Profile of the Biomedical Engineer

## LEARNING RESOURCES AND BIBLIOGRAPHY

<b>Learning resources</b>	<b>Bibliography</b>
Subject notes Moodle Platform Presentations by external Lecturers Video projections	(No bibliography)