[GBR103] BIOMEDICAL ETHICS

GENERAL INFORMATION

Studies	DEGREE IN BIOMEDICAL ENGINEERING			**Subject**	Humanities and Social Science Applied to Health
Semester	1	**Course**	4	**Mention / Field of specialisation**	
Character	OPTIONAL				
Plan	2017	**Modality**	Adapted Face-to-face	**Language**	EUSKARA
Credits	3	**Hours/week**	2.5	**Total hours**	45 class hours + 30 non-class hours = **75 total hours**

PROFESSORS

AZPI-KANPANDEGI, HARITZ (HUHEZI)

REQUIRED PREVIOUS KNOWLEDGE

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

SKILLS

VERIFICA SKILLS

SPECIFIC

GBCE33 - The ability to consider, argue and describe matters of a social, scientific or ethical nature in the field of Biomedical Engineering.

GENERAL

GBCG7 - To be able to analyse and assess the social and environmental impact of technical solutions.

CROSS

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

BASIC

G_CB4 - To be able to communicate information, ideas, problems and solutions to both expert and lay audiences

LEARNING RESULTS

RGB406 **[!]** ***Reflexiona sobre asuntos de índole social, científica o ética en el ámbito de la Ingeniería Biomédica***

LEARNING ACTIVITIES	CH	NCH	TH
Presentation of the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	10 h.	10 h.	20 h.
Individual and team exercises	10 h.	5 h.	15 h.
Classroom presentations of relevant concepts and procedures in participatory environments	10 h.	5 h.	15 h.

EVALUATION SYSTEM	W
Reports of solving exercises, case studies, computer practices, simulation practices and laboratory practices	30%
Technical skills, involvement in the project, finished work, obtained results, handed documentation, presentation and technical defence	70%

MAKE-UP MECHANISMS

(No mechanisms)

CH - Class hours: 30 h.
NCH - Non-class hours: 20 h.
TH - Total hours: 50 h.

RGB407 **[!]** ***Argumenta y describe asuntos de índole social, científica o ética en el ámbito de la Ingeniería Biomédica***

LEARNING ACTIVITIES	CH	NCH	TH
Development, writing and presentation of memorandums, reports, audiovisual material, etc. Relating to projects/POPBLs carried out individually or in teams	6 h.	4 h.	10 h.
Presentation of the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	6 h.	4 h.	10 h.
Classroom presentations of relevant concepts and procedures in participatory environments	3 h.	2 h.	5 h.

EVALUATION SYSTEM	W

MAKE-UP MECHANISMS

Technical skills, involvement in the project, finished work, obtained results, handed documentation, presentation and technical defence	70%	*(No mechanisms)*
Team oral tests for the evaluation of technical skills of the subject	30%	

CH - Class hours: 15 h.
NCH - Non-class hours: 10 h.
TH - Total hours: 25 h.

CONTENTS

1st Module: SOCIAL CHANGES

. The socio-economic dimension of globalization and the new world order

. The energetic and environmental challenge

. Indicators of change: GDP, HDI and ecological footprint

. Time of change or a change of time?

2nd Module: SCIENCE, TECHNOLOGY AND SOCIETY

. Introduction

. Scheduled obsolescence

. Products lifecycle

. The circular economy

. Case study: smartphones

. Engineering Deontology / Jovens Paradox / Precautionary Principle

3rd Module: BUSINESS CONTEXT AND THE COOPERATIVE ENTERPRISE

. Introduction to the business context

. Main business models

. Social innovation and the social economy

. Cooperatives: what, why and for what?

. Case Study: The Mondragon Cooperative Experience

LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources

Technical articles
Class presentations
Video projections
Slides of the subject
Presentations by external Lecturers

Bibliography

Alburquerque, F. (2018). Conceptos básicos de economía. En busca de un enfoque ético, social y ambiental. Deusto.

Altuna, L. (2008). Arrasateko kooperatiba esperientzia. SIntesi orokorra.. Eskoriatza: Lanki—Huhezi, Mondragon Unibertsitatea.

Ávila, R. C., & Campos, J. L. M. (2018). La economía social ante los paradigmas económicos emergentes: innovación social, economía colaborativa, economía circular, responsabilidad social empresarial, economía del bien común, empresa social y economía solidaria. CIRIEC-España, revista de economía pública, social y cooperativa,

(93), 5-50.

Azkarraga, J., & Kausel, T. (2011). La evolución sostenible: Una crisis multidimensional.(I). Mondragon Unibertsitatea. Humanitate eta Hezkuntza Zientzien Fakultatea.

Bauman, Z. (2014). ¿La riqueza de unos pocos nos beneficia a todos? Ed. Paidós.

Bilbao, G., Fuertes, J., & Guibert, J. M. (2006). Ética para ingenieros. Sevilla: Desclée De Brouwer.

Chouinard, Y. (2006). Que mi gente vaya a hacer surf: La educación de un empresario rebelde. Ed. Desnivel.

Herrero, Y., Cembranos, F., & Pascual, M. (Eds.). (2015). Cambiar las gafas para mirar el mundo: una nueva cultura de la sostenibilidad. Libros en Acción.

Moulaert, F. (Ed.). (2013). The international handbook on social innovation: collective action, social learning and transdisciplinary research. Edward Elgar Publishing.

Monzón, J.L y Chaves, R. (2017). Evolución reciente de la economía social en la Unión Europea. Ed. Comité Económico y Social Europeo.

Nicholls, A. (Ed.). (2008). Social entrepreneurship: New models of sustainable social change. OUP Oxford.

Stiglitz, J. E. (2010). Cómo hacer que funcione la globalización. Taurus.

Tirole, J. (2016). La economía del bien común. Taurus.