Information about the subject

Degree: Bachelor of Science Degree in Biotechnology

Faculty: Faculty of Veterinary Medicine and Experimental Sciences

Code: 110407 **Name:** Social Morality, Ethics and Deontology

Credits: 6,00 **ECTS Year:** 4 **Semester:** 2

Module: Social and Economic Aspects of Molecular Biosciences and Biotechnology

Subject Matter: Ethics and Professional Deontology **Type:** Compulsory

Department: Theology, Social Doctrine of the Church and Deontology or Professional Ethics

Type of learning: Classroom-based learning

Languages in which it is taught: Spanish

Lecturer/-s:

1104	Jose Manuel Hernández Castellón **(Responsible Lecturer)**	jm.hernandez@ucv.es
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Module organization

Social and Economic Aspects of Molecular Biosciences and Biotechnology

Subject Matter	ECTS	Subject	ECTS	Year/semester
Anthropology	6,00	Anthropology	6,00	1/2
Social Doctrine of the Catholic Church	6,00	Science, Reason and Faith	6,00	2/2
Legal and Economical aspects in Biotechnology	6,00	Legal and Economic Aspects of Biotechnology	6,00	4/2
Ethics and Professional Deontology	6,00	Social Morality, Ethics and Deontology	6,00	4/2
English	6,00	English	6,00	1/2

Learning outcomes

At the end of the course, the student must be able to prove that he/she has acquired the following learning outcomes:

R1 The student has understood and assimilated the contents of the subject.

R2 The student is able to solve problems or case studies related to the subject contents, by using different resources (bibliographic, IT, etc.)

R3 The student is able to write an intelligible and organized text on different aspects of the subject.

R4 The student is able to present and defend his/her work adequately.

R5 The student seeks bibliographic information from different sources and can analyze it with a critical and constructive spirit.

R6 The student collaborates with the teacher and his/her peers throughout the learning process; he/she works in a team; treats everyone with respects, is proactive and fulfills the organization rules of the course.

Competencies

Depending on the learning outcomes, the competencies to which the subject contributes are (please score from 1 to 4, being 4 the highest score):

BASIC		Weighting			
		1	2	3	4
CB1	Students acquire and understand knowledge in their field of study based on general secondary education but usually reaching a level that, although supported on advanced text books, also includes aspects involving state-of-the-art knowledge specific to their area.			x	
CB2	Students are able to apply knowledge to their work in a professional way and have the competences enabling them to state and defend views and opinions as well as perform problem-solving tasks in their field of study.				x
CB3	Students are able to collect and interpret relevant data (generally in their field of study) and give opinions that involve reflection on relevant social, scientific or ethical issues.				x
CB4	Students can communicate information, ideas, problems and solutions to a specialized or non-specialized audience.			x	
CB5	Students develop the necessary learning skills to undertake further studies with a high level of autonomy.		x		

GENERAL		Weighting			
		1	2	3	4
CG01	Capacity to analyze and synthesize.			x	

SPECIFIC		Weighting			
		1	2	3	4
CE22	Knowing and understanding contents, principles and theories related to biotechnology.		x		

CE33	Knowing and complying with legislation and ethics of biotechnological processes and applications.				x
CE34	Knowing main characteristics of Molecular biosciences and biotechnology communication.	x			

TRANSVERSAL		Weighting			
		1	2	3	4
CT02	Capacity to organize and plan.		x		
CT03	Mastering Spanish oral and written communication.			x	
CT05	Knowing and applying Basic ITC skills related to Biotechnology.		x		
CT06	Capacity to manage information (capacity to look for and analyze information coming from different types of sources).			x	
CT07	Problem solving.		x		
CT09	Capacity to work in interdisciplinary and multidisciplinary team.				x
CT10	Interpersonal skills.			x	
CT11	Understanding multicultural and diverse environment			x	
CT12	Critical and self-critical capacity.			x	
CT13	Ethics.				x
CT14	Capacity to learn			x	
CT16	Capacity to produce new ideas (creativity)	x			
CT19	Capacity to apply theoretical knowledge		x		
CT20	Research skills		x		
CT21	Sensitivity to environmental issues		x		

Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
	60,00%	Written test
	40,00%	Submission of papers

Observations

According to the general evaluation and qualification regulations, the preferred evaluation system will be by means of continuous evaluation. Throughout the course, different tasks associated with the contents taught will be carried out to strengthen their learning. These tasks are part of the continuous evaluation, so they cannot be done after the deadline or in the second call. In order to count their score in the final grade, the subject exam must be passed.

The student must pass the written test in order to average with the rest of the assessment elements. The pappers are some briefs abour articles (they must be delivered like tasks) and 5 briefs about 5 lectures about bioethics.

FOR THE ONLINE GROUP AND S GROUP (SECOND ENROLMENT STUDENTS).
The material necessary to follow the course is available on the Platform. The student will be able to follow the course by means of online tutorials. In order to make the final test, the student must submit all the proposed compulsory activities before the established deadline, and must get a "PASS". If the student takes the second chance exam, this does not exempt him/her from the obligation of submitting the activities and submit them during the second chance period. If he/she fails to do so, the student will not be able to pass the course in that academic year.

Finally, according to article 10 of the current assessment regulations, in the event that it is impossible for students enrolled in a face-to-face degree to attend, they may opt for ‘single assessment’. This is an extraordinary and exceptional assessment system available to those students who, in a justified and accredited manner, are unable to undergo the continuous assessment system and request it within the first month of each semester, by the means provided for this purpose. The Dean of the Faculty shall decide on the admission of the student's request for a single assessment.

MENTION OF DISTINCTION:
In accordance with the regulations governing the assessment and grading of subjects in force at UCV, the distinction of "Matrícula de Honor" (Honours with Distinction) may be awarded to students who have achieved a grade of 9.0 or higher. The number of "Matrículas de Honor" (Honours with Distinction) may not exceed five percent of the students enrolled in the group for the corresponding academic year, unless the number of enrolled students is fewer than 20, in which case a single "Matrícula de Honor" (Honours with 9 Distinction) may be awarded. Exceptionally, these distinctions may be assigned globally across different groups of the same subject. Nevertheless, the total number of distinctions awarded will be the same as if they were assigned by group, but they may be distributed among all students based on a common criterion, regardless of the group to which they belong. The criteria for awarding "Matrícula de Honor" (Honours with Distinction) will be determined according to the guidelines stipulated by the professor responsible for the course, as detailed in the "Observations" section of the evaluation system in the course guide.

Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

M1	Teacher presentation of contents, analysis of competences, explanation and in-class display of skills, abilities and knowledge.
M2	Group work sessions supervised by the professor. Case studies, diagnostic tests, problems, field work, computer room, visits, data search, libraries, on-line, Internet, etc. Meaningful construction of knowledge through interaction and student activity.
M4	Supervised monographic sessions with shared participation..
M5	Application of multidisciplinary knowledge.
M6	Personalized and small group attention. Period of instruction and/or guidance carried out by a tutor to review and discuss materials and topics presented in classes, seminars, readings, papers, etc.
M7	Set of oral and/or written tests used in initial, formative or additive assessment of the student
M8	Group preparation of readings, essays, problem-solving, seminars, papers, reports, etc. to be presented or submitted in theoretical , practical and/or small-group tutoring sessions. Work done on the university e-learning.

M9 Student's study: Individual preparation of readings, essays, problem-solving, seminars, papers, reports, etc. to be presented or submitted in theoretical, practical and/or small-group tutoring sessions. Work done on the university e-learning platform.

IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
ON-CAMPUS CLASS M1	R6	28,00	1,12
PRACTICAL CLASSES M2	R1, R2, R3, R4, R6	26,00	1,04
SEMINAR M4	R4	0,60	0,02
GROUP PRESENTATION OF ASSIGNMENTS M5	R1, R3, R6	0,60	0,02
TUTORIAL M6	R2, R6	4,40	0,18
ASSESSMENT M7	R1, R2, R4, R5, R6	2,40	0,10
TOTAL		**62,00**	**2,48**

LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
AUTONOMOUS GROUP WORK M8	R4, R5, R6	24,00	0,96
AUTONOMOUS INDIVIDUAL WORK M9	R1, R2, R3, R4, R5, R6	64,00	2,56
TOTAL		**88,00**	**3,52**

Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
CONCEPTUAL FOUNDATIONS	Moral, ethics, deontology, law. Ethical codes. Fundamental ethical issues.
INTRODUCTION TO BIOETHICS	Principles and foundations of Bioethics.Bioethics and legislation.
BIOETHICS ISSUES APPLIED TO BIOSCIENCES	Ethics of scientific research. Bioethical aspects of animal experimentation, clinical trials, analysis of human molecular genetics, gene and cell therapy. Embryo experimentation, transgenesis, cloning.

Organization of the practical activities:

	Content	Place	Hours
PR1.	SESSIONS OF GROUP WORK IN GROUPS ARE SUPERVISED BY THE TEACHER,	Lecture room	10,00
PR2.	SIGNIFICANCE CONSTRUCTION OF THE KNOWLEDGE TROUGH THE INTERACTION AND ACTIVITY OF THE PUPIL	Lecture room	10,00
PR3.	CASE STUDY	Lecture room	10,00

Temporary organization of learning:

Block of content	Number of sessions	Hours
CONCEPTUAL FOUNDATIONS	13,00	26,00
INTRODUCTION TO BIOETHICS	8,00	16,00
BIOETHICS ISSUES APPLIED TO BIOSCIENCES	10,00	20,00

References

BIBLIOGRAPHY:

CICCONE, L., *Bioética. Historia, principios, cuestiones* (Palabra, Madrid 2005).
POLAINO-LORENTE, A. (Dir.) *Manual de bioética general* (Rialp, Madrid 1997).
SGRECCIA, E., *Manual de bioética*, vol. 1 y 2 (BAC, Madrid 2009).
SIMÓN VÁZQUEZ, C. (Dir.), *Diccionario de Bioética* (Monte Carmelo, Burgos 2006).
TOMÁS GARRIDO, G. M., (Coord.) *Manual de Bioética* (Ariel, Madrid 2001).

OTHER MATERIALS:

ANDORNO, R., *Bioética y dignidad humana* (Tecnos, Madrid 1998).
AZNAR LUCENA, J. (Coord.), *La vida humana naciente. 200 preguntas y respuestas* (BAC, Madrid 2008).
BONET, E., PARDO SÁEZ, J.M., *Hay un embrión en mi nevera* (EUNSA, Pamplona 2007).
CASADO, M., *Las leyes de la bioética* (Gedisa, Barcelona 2004).
FRANCISCO I, Carta enc. *Laudate Si'* (2015)
MARTÍNEZ CAMINO, J.A. *¿Qué pasa por fabricar hombres?* (Desclée de Brouwer, Bilbao 2002)
RIFKIN, J. *El siglo de la biotecnología* (Crítica, Barcelona 1999)
SPAEMANN, R. *Personas. La diferencia entre algo y alguien* (Eunsa, Pamplona 2000); *Límires. Acerca de la dimensión ética del actuar* (Eiunsa, Madrid 2003).

LINKS TO BIOETHICS:

Observatorio de Bioética UCV II http://www.observatoriobioetica.org/ Bioética en la red || www.bioeticaweb.com Blog Ética y Bioética || www.mercaba.org/Filosofia/Etica/cartel_etica_bioetica.htm Cátedra Bioética UNESCO || www.catedrabioetica.com Con Dignidad || www.condignidad.org Instituto de Consulta y Especialización en Bioética || www.bioeticacs.org