

1. OVERVIEW

Subject Area	ETHICS
Degree	BIOTECHNOLOGY
School/Faculty	Faculty of Biomedical Sciences
Year	SECOND
ECTS	3
Type	COMPULSORY
Language(s)	Spanish
Delivery Mode	On campus
Semester	Second semester
Academic Year	24-25
Coordinating professor	Carolina Knott Torcal
Teacher	

2. INTRODUCTION

This is a compulsory subject (worth 3 ECTS) taught in the second year of the Degree in Biotechnology. This subject belongs to the Social and Economic Aspects of Biotechnology module.

The main aim of this subject area is to teach students the ethical, legal and social aspects associated with biotechnology and research.

The overall objectives of the subject area are:

- Provide necessary knowledge about the principles of bioethics.
- Teach the basics of professional conduct.
- Teach how to deal with the main ethical problems and conflicts.
- Ethics in biotechnology.

3. LEARNING OUTCOMES (RA, by the acronym in Spanish)

Knowledge (CON, by the acronym in Spanish)

CON08. Identify the common technological innovation and collaboration processes in biotechnology companies understanding the ethical and bioethical principles involved.

- Identify basic principles of ethics and bioethics and apply them to personal and professional life.

Abilities (HAB, by the acronym in Spanish)

HAB04. Design experimental procedures and protocols choosing the most suitable technique in the field of biotechnological research, all the while meeting quality and legislative standards.

- Manage the regulations and current legislation that govern biotechnological processes and products.
- Analyse and synthesise the main ideas and contents of all types of texts; discover the theses contained in them and the issues raised, and critically judge their form and content.
- Develop criteria for problem solving and decision making both in the professional and personal spheres.

Skills

COMP15. Integrate and apply the ethical and deontological principles of a professional in biotechnology and resolve ethical conflicts which are common in this profession.

4. CONTENTS

- Introduction to applied ethics. Fundamentals of bioethics.
- Professional ethics. Professional deontology.
- Describe the main current scientific topics from a clear bioethical point of view. Analyse the biological, anthropological and ethical aspects involved in the different topics studied.
- Debate the main bioethical issues based on data from scientific reasoning.
- Deal with different viewpoints and bioethical alternatives.
- Describe and apply current legislation when analysing biotechnological case studies which involve bioethics.
- Critically analyse scientific or philosophical theses associated with the bioethical topics covered in class. Analyse from a multidisciplinary point of view real or hypothetical cases associated with the bioethical topics covered in class.

The course will be divided into the following topics:

Topic 1. Introduction to ethics. Professional morals and deontology

Topic 2. The birth and history of bioethics

Topic 3. Informed consent and humanisation

Topic 4. Clinical research. Ethical codes and research on humans and animals

Topic 5. Ethics committees

Topic 6. Environmental ethics

Topic 7. Neuroethics Trans-humanism and post-humanism

Topic 8. Genetics. Genetically modified organisms

Topic 9. Bioethics at the beginning of life Voluntary interruption of pregnancy, assisted reproductive techniques and gestational surrogacy

Topic 10. Bioethics at the end of life Palliative care and euthanasia

5. TEACHING/LEARNING METHODS

The types of teaching/learning methods are as follows:

- Lecture
- Case studies
- Simulated environments

6. LEARNING ACTIVITIES

The types of learning activities, plus the amount of time spent on each activity, are as follows:

On campus:

Learning activity	Number of hours
Lectures	22
Debates and discussions	5
Case Studies	5
Spoken presentations	3
Written reports and essays	2
Tutorials	15
Independent working	20
On-campus knowledge tests	3
TOTAL	75

7. ASSESSMENT

The assessment methods, together with how much they each count towards the final grade for the subject area, are as follows:

On campus:

Assessment system	Weighting
On-campus knowledge test	50%
Reports and written work + oral presentation	20%
Case studies/Problem-solving	15%
Seminars (role-playing, simulated environments, inverted classes)	10%
Optional activity	5%

On the Virtual Campus, when you open the subject area, you can see all the details of your assessment activities and the deadlines and assessment procedures for each activity.

7.1. Ordinary exam period

To pass the subject area in the ordinary exam period you must obtain a mark of 5.0 or more out of 10.0 in all assessed parts of the subject. Any part you do not pass in the ordinary exam period will need to be recovered in the extraordinary exam period (resits).

Your final grade will be the average of the partial marks in each of the learning activities you have passed.

The continuous assessment system for the learning activities requires attendance to at least 50% of the classes.

It is compulsory for students to accredit attendance to at least 50% of classes. This requirement is essential to the assessment process and qualifies students for the right to obtain academic counselling, support and monitoring from the professor. To this end, students must use the technological means made available by the University to accredit their daily attendance to each of their classes. This system will also serve to guarantee an objective record of the active role of the students in the classroom. Failure to accredit attendance to at least 50% of the classes by any of the means proposed by the University will mean that the professor awarding a fail to the student for that subject area in the ordinary exam period in accordance with the grading system outlined in these regulations. All of the above, without prejudice to the other requirements or higher attendance percentages that other faculties may stipulate in their learning guides or internal regulations. Regulations for the assessment of official degree programmes, Art. 1 point 4.

7.2. Extraordinary exam period (resits)

To pass the subject area in the extraordinary exam period (resits), the students must obtain a mark equal to or above 5.0 out of 10.0 in all parts of the subject assessment they did not pass during the ordinary exam period.

The student must submit the activities not passed in the ordinary exam period taking into account the corrections or comments made by the teacher. The student must also submit any activities which were not submitted.

The final grade will be the average of the partial marks in each of the activities passed (with a mark equal to or higher than 5 out of 10). The marks for the assessable activities the student passed in the ordinary exam period will be maintained for calculating this grade.

8. TIMELINE

The timeline with delivery dates of assessable activities in the subject area is indicated in this section:

Assessable activities	Date
Knowledge test 1 (partial exam)	11 March
Case studies/Problem-solving	17 March
Research project	28 April
Oral presentation	13-14 May
Optional activity	5 May
Knowledge test (final exam)	27 May - 07 June

The timeline may be subject to modifications for logistical reasons of the activities. Students will be informed of any changes in due time and course.

9. BIBLIOGRAPHY

The reference work for following this subject area is:

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- Gracia D. Procedimientos Sánchez González MA. Ética, bioética y globalidad. Madrid, CEP, 2006.
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- López Guzmán, J. & Aparisi Miralles, Á. (2012). Aproximación a la problemática ética y jurídica de la maternidad subrogada. *Cuadernos de bioética*, 23(2), 253-267.
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- Sánchez González MA. Bioética en Ciencias de la Salud. Madrid, Elsevier, 2012.
- Taboada, P. Y López R., Metodología de análisis ético de casos clínicos en García, José Juan(director): Enciclopedia de Bioética.

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- Beauchamp TL, Childress JF. Principios de ética biomédica. Barcelona, Masson, 1999.
- Hengelhart HT, The foundation of bioethics, New York, Oxford University Press, 1996.
- Jonsen A, Siegler M, Winslade W. Clinical Ethics: A Practical Approach to Ethical Decisions in Clinical Medicine, 6th ed. McGraw-Hill Medical Publishing New York: 2006
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- Wilches, Á. M. (2011). La propuesta bioética de Van Rensselaer Potter, cuatro décadas después. *Opción*, 27(66), 70-84.

10. EDUCATIONAL GUIDANCE AND DIVERSITY UNIT

The Educational Guidance and Diversity Unit (ODI in Spanish) offers support throughout your time at university to help you with your academic achievement. Other cornerstones of our educational policy are the inclusion of students with special educational needs, universal access in all our university campuses and equal opportunities.

This ODI unit offers students:

1. Support and monitoring through counselling and personalised student plans for those who need to improve their academic performance.
2. Curricular adaptations to uphold diversity, with assistance for those students who require specific educational support, leading to equal opportunities without significant changes to methodology or evaluation.
3. We offer students a range of extracurricular educational resources to reinforce skills which will enhance their personal and professional development.
4. Career guidance by offering tools and advice to students with doubts regarding their professional careers or those who believe they have chosen the wrong line of study.

Students who need educational support can contact us at:

orientacioneducativa@universidadeuropea.es

11. SATISFACTION SURVEYS

Your opinion matters!

Universidad Europea encourages you to complete our satisfaction surveys to identify strengths and areas for improvement for staff, degree courses and the learning process.

These surveys will be available in the surveys area of your virtual campus or by email.

Your opinion is essential to improve the quality of the degree.

Many thanks for taking part.