

Ethics of Contemporary Challenges

Code: 106234
ECTS Credits: 6

Degree	Type	Year	Semester
2504235 Science, Technology and Humanities	OB	2	2

Contact

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Use of Languages

Principal working language: spanish (spa)
Some groups entirely in English: No
Some groups entirely in Catalan: No
Some groups entirely in Spanish: No

External teachers

Carmen Madorrán Ayerra
José María Carrascosa Baena

Prerequisites

There are none.

Objectives and Contextualisation

At the end of the course students should achieve the following objectives:

- Identify, analyze and critically evaluate problems derived from the scientific and technological activity as well as its relevant moral, ecological and social issues.
- Communicate in an effective way, both oral and written, the result of the analysis of the ecological, ethical and social dimensions of science and Technology (of both its research and development, and its applications).
- Know the main moral challenges associated to research, the use and the consequences of science and technology in our contemporary societies.

Competences

- Act with ethical responsibility and respect for fundamental rights and duties, diversity and democratic values.
- Apply knowledge of ethics to science in society and gauge the impact of technological change on people and the human condition.
- Develop and evaluate interdisciplinary projects that combine scientific, technological and humanistic knowledge and encourage citizens' involvement in matters related to science and technology in society.
- Explain the basic concepts related to life, its origin and evolution, especially those referring to health and illness throughout history.
- Innovate in the methods and processes of this area of knowledge in response to the needs and wishes of society.
- Make critical use of digital tools and interpret specific documentary sources.

- Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
- Students must be capable of communicating information, ideas, problems and solutions to both specialised and non-specialised audiences.
- Students must have and understand knowledge of an area of study built on the basis of general secondary education, and while it relies on some advanced textbooks it also includes some aspects coming from the forefront of its field of study.
- Work collaboratively in teams.

Learning Outcomes

1. Assess possible alternatives to animal experimentation.
2. Critically analyse recent science news in the Media.
3. Critically evaluate different ethical challenges in today's world.
4. Develop projects on the ethics of contemporary science and technology.
5. Identify the functions of research ethics committees.
6. Intervene in debates on ethical dilemmas associated with scientific developments.
7. Know the basic principles of risk management.
8. Know the biophysical limits of planet Earth.
9. Know the concept of transhumanism.
10. Know the directives on personal data protection.
11. Know the principles of environmental (principle of precaution, etc.).
12. Present reports on ethical dilemmas associated with specific scientific developments.
13. Produce papers as part of a group.

Content

1. Fundamentals: environmental ethics and Third Culture
2. Bioethical Issues
3. Needs, capabilities and basic goods (in a finite planet)
4. Moral and political challenges of transhumanism
5. Moral challenges of scientific-technological research (robotics and AI)
6. Moral challenges of biomedical research (genomic edition, transhumanism)

Methodology

Lectures.

Text discussion seminars.

Team work and oral presentations.

Individual written essay.

Exam.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Learning exercises	16	0.64	2, 8, 7, 11, 10, 4, 13, 6, 12, 3
Lectures	33	1.32	9, 8, 7, 11, 10, 5, 3, 1

Type: Supervised

Essay supervision	4.25	0.17	2, 9, 8, 11, 12, 3, 1
Type: Autonomous			
Bibliographic research	20	0.8	2, 9, 8, 11, 4, 1
Personal study	33	1.32	2, 9, 8, 11
Work on presentation	6.25	0.25	2, 4, 13, 6, 12
Writing of essay	35	1.4	2, 9, 8, 12, 3

Assessment

Oral presentation of team work and assessable ppt.

Individual written essay on assigned topic.

Exam.

Participation.

In the event of a student committing any irregularity that may lead to a significant variation in the grade awarded to an assessment activity, the student will be given a zero for this activity, regardless of any disciplinary process that may take place. In the event of several irregularities in assessment activities of the same subject, the student will be given a zero as the final grade for this subject.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Essay	30%	0	0	2, 9, 8, 12, 3
Exam	30%	2	0.08	2, 9, 8, 7, 11, 10, 5, 12, 3, 1
Participation	10%	0	0	13
Presentation	30%	0.5	0.02	2, 4, 13, 6, 12

Bibliography

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Software

None required.