The advancement of knowledge and science is only possible if it is carried out according to its essential values such as rigour, objectivity, truthfulness, accuracy and impartiality. Attitudes of cooperation, critical thinking, transparency and communication are also important pillars for the advancement of science and the generation of knowledge.

The importance of the ethical dimension of research can be justified from the very serious consequences that scientific malpractice has generated throughout history, as well as from the situations of ethical conflict that researchers face on a daily basis. The relevance and urgency of this issue makes it necessary to develop formal training processes for young researchers, where they know in an orderly and well-founded way the ethical problems that can be found in their research career as well as the means they have for managing these problems and maintaining responsible behavior.

5. Course Outline
The advancement of knowledge and science is only possible if it is carried out according to its essential values such as rigour, objectivity, truthfulness, accuracy and impartiality. Attitudes of cooperation, critical thinking, transparency and communication are also important pillars for the advancement of science and the generation of knowledge.

The importance of the ethical dimension of research can be justified from the very serious consequences that scientific malpractice has generated throughout history, as well as from the situations of ethical conflict that researchers face on a daily basis. The relevance and urgency of this issue makes it necessary to develop formal training processes for young researchers, where they know in an orderly and well-founded way the ethical problems that can be found in their research career as well as the means they have for managing these problems and maintaining responsible behavior.

6. Recommended Prior Knowledge
It is essential to read English fluently.

7. Student Outcomes

Specific Student Outcomes
CG16(E) Understand relevant health and safety issues and demonstrate responsible work practices.
CG15(E) Demonstrate knowledge of issues relating to the rights of other researchers and research, e.g. confidentiality, attribution of copyright, ethics, negligence, prevention of plagiarism, ownership of data and the requirements of the Data Protection Act.

UPV-Generic Student Outcomes

(03) Analyzing and solving problems
(07) Ethical, environmental and professional responsibility

- Activities carried out to achieve the student outcome
  Case study analysis
  Detailed description of the activities
- Cases of misconduct in research are raised and an analysis of their causes and possible solutions is requested.
- International reference documents on research ethics are sought and their application to the specific field of research is requested.
- Assessment criteria
  The cases and essays presented are evaluated according to criteria of academic rigour.

(10) Awareness of contemporary problems issues

8. Syllabus

1. Topic 1. Introduction
   1. - The scientist as a responsible member of society and the social impact of research
   2. - Definition of ethics and its application to the practice of research.
   3. - Epistemological approaches and their ethical implications.

2. Topic 2: Ethical values in scientific research.
   1. - The purpose and means of the research
   2. - Objectivity and rigour in research.
   3. - Authenticity and source recognition (Plagiarism)
   4. - Corruption in investigative practices.
   5. - Integrity in the Peer review of projects, publications, etc.

3. Topic 3: Bioethics I: Ethical aspects in human research
   1. - Bioethics: science and technology and their impact on life

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8. Syllabus

2. Basic principles of bioethics in biomedicine
3. International declarations: Nuremberg Code, Belmont Report, Declaration of Helsinki, etc.
4. Responsible management of research (confidentiality, informed consent, data management, research with vulnerable groups).
4. Item 4: Bioethics II: Research, environment, animals and the protection of the vine
1. The impact of research on the environment (biosafety)
2. Ethical criteria in animal research
3. Ethical and social aspects of patenting genes and organisms
5. Item 5: Ethical problems in knowledge transfer.
1. Collaborative research with industry
2. Conflicts of interest (personal, professional and financial)
3. Sources and means of financing
4. Ownership of research results
6. Item 6: Ethical issues in information and knowledge management
1. Ownership of information and confidentiality
2. Use of research results
3. Responsible Authors and Publishers
4. Complaints of scientific malpractice (Whistle-blowing)
7. Item 7: Ethics in the management of research teams
1. Duties of the Research Director
2. Obligations and rights of the researcher
3. Responsible relations between directors and researchers
4. Critical loyalty to the organization.
8. Item 8: Research ethics at the UPV
1. Research Ethics Committee
2. Documents of "good scientific practices" and "Conflict of interests".

9. Teaching and Learning Methodologies

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10. Assessment

**Outline**

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