

Academic Year: (2024 / 2025)

Review date: 17-04-2024

Department assigned to the subject: International Law, Ecclesiastical Law and Philosophy of Law Department

Coordinating teacher: LEMA AÑON, CARLOS

Type: Compulsory ECTS Credits : 3.0

Year : 4 Semester : 2

SKILLS AND LEARNING OUTCOMES

RA3: Be able to carry out conceptual designs for bioengineering applications according to their level of knowledge and understanding, working in a team. Design encompasses devices, processes, protocols, strategies, objects and specifications broader than strictly technical, including social awareness, health and safety, environmental and commercial considerations.

RA6: Transversal Skills: To have the necessary skills for the practice of biomedical engineering in today's society.

CB1: Students have demonstrated possession and understanding of knowledge in an area of study that builds on the foundation of general secondary education, and is usually at a level that, while relying on advanced textbooks, also includes some aspects that involve knowledge from the cutting edge of their field of study.

CB2: Students are able to apply their knowledge to their work or vocation in a professional manner and possess the competences usually demonstrated through the development and defence of arguments and problem solving within their field of study.

CB3: Students have the ability to gather and interpret relevant data (usually within their field of study) in order to make judgements which include reflection on relevant social, scientific or ethical issues.

CB6: That the student has developed sensitivity to the social and economic impact of the development of his/her profession in accordance with professional ethics..

CG4: Ability to solve problems with initiative, decision-making, creativity, and to communicate and transmit knowledge, skills and abilities, understanding the ethical, social and professional responsibility of the biomedical engineer's activity. Capacity for leadership, innovation and entrepreneurial spirit.

CG5: Adequate knowledge of the field of work of the biomedical engineer in companies, health or biomedical research centres.

CG6: Knowledge of current standards, regulations and legislation and ability to apply them to bioengineering projects. Bioethics applied to biomedical engineering.

ECRT23: Acquisition of basic knowledge of humanistic training. Awareness of different areas of social problems. Understanding of the concepts of Business Ethics and Bioethics. Capacity for business entrepreneurship.

CT1: Ability to communicate knowledge orally and in writing to both specialised and non-specialised audiences.

CT2: Ability to establish good interpersonal communication and to work in multidisciplinary and international teams.

CT3: Ability to organise and plan their work, making the right decisions based on the information available, gathering and interpreting relevant data in order to make judgements within their area of study.

OBJECTIVES

Within this course, students will be provided with a foundation in understanding and solving problems related to bioethics. In this course, each student will:

- acquire legal and ethical criteria to face social issues of life sciences and medicine in a multidisciplinary way.
- be acquainted with bioethical aspects of professional and societal activities.
- develop their abilities think and to argue from an ethical point of view.
- develop their critical sense on bioethical issues

- know the basic contents of academic bioethical developments
- raise awareness of minorities and vulnerable groups in the field of bioethics.

DESCRIPTION OF CONTENTS: PROGRAMME

- Lesson 1: Ethics, morality, and law. Public and private reasons.
- Lesson 2: Justification in ethics. Metaethics and normative ethics.
- Lesson 3. The foundations of Bioethics. The origins of Bioethics. Basic principles on bioethics. Bioethics, Rule of Law and Democracy.
- Lesson 4. Medical ethics. Informed consent. Organ transplantation. Clinical essays.
- Lesson 5. Birth and death. The beginning of life: assisted reproduction, abortions. End of life: on dying.
- Lesson 6. Bioethics and Vulnerable Groups. Bioethics and gender: feminist bioethics. Bioethics and Children. Bioethics and the elder. Bioethics and disability.
- Lesson 7. Bioethics and genetics. Genetic information. Genetic interventions on human beings.

LEARNING ACTIVITIES AND METHODOLOGY

LECTURES:

It is imperative that the student reads the recommended chapters or articles before the class. These will be provided in advance.

- 1) Lectures: During the lectures, the proposed topic will be presented, always encouraging discussion.
- 2) Discussion Sessions: When the topic allows it, groups of 3-5 will be formed for discussion sessions to solve particular problems related to the current topic with the main idea of understanding them and developing different strategies to solve it, underlining the fact that there are almost always different approaches to the same problem.
- 3) Oral Presentations: At least once during the course, each student will have the chance to do a short oral presentation on a topic related to the course. These oral presentations will be prepared either individually or in groups.

HOMEWORK:

Homework will be assigned frequently throughout the course and will count for the assessment.

ASSESSMENT SYSTEM

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| % end-of-term-examination: | 0 |
| % of continuous assessment (assignments, laboratory, practicals...): | 100 |
- Composition of three essays (700-1000 words) (60%) and a final essay (3000-4000 words) (20%)
 - Oral presentation (10%)
 - Participation (10%)

BASIC BIBLIOGRAPHY

- Campbell, A. V. Bioethics: The Basics , Routledge, 2017
- Dworkin, Ronald Life's Dominion: An Argument about Abortion, Euthanasia, and Individual Freedom, Knopf, 1993
- Kuhse, Helga, Udo Schüklenk, and Peter Singer Bioethics : An Anthology, Blackwell , 2016
- Pierce, J., Randels, G. Contemporary Bioethics: A Reader with Cases, Oxford University Pres, 2010
- Rachels, J. The elemens of moral philosophy, McGraw Hill, 2018
- Singer, P. Practical Ethics, Cambridge University Press, 2011

- Vallero, D. A. Biomedical Ethics for Engineers Ethics and Decision Making in Biomedical and Biosystem Engineering, Elsevier/Academic Press, 2007
- Vaughn, L. Bioethics: Principles, Issues, and Cases, 2019, Oxford University Press
- Veatch, R., Guidry-Grimes, L. K. The Basics of Bioethics , Routledge, 2019