## POZNAN UNIVERSITY OF TECHNOLOGY



#### EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

pl. M. Skłodowskiej-Curie 5, 60-965 Poznań

## **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

**Bioethics** 

Course

Field of study Year/Semester

Biomedical engineering 4/7

Area of study (specialization) Profile of study

general academic

Level of study Course offered in

First-cycle studies polish

Form of study Requirements full-time compulsory

**Number of hours** 

Lecture Laboratory classes Other (e.g. online)

15 0 0

Tutorials Projects/seminars

0 0

**Number of credit points** 

3

**Lecturers** 

Responsible for the course/lecturer: Responsible for the course/lecturer:

dr hab. inż. Hubert JOPEK

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tel. +4861 665-2307

Wydział Inżynierii Mechanicznej ul. Jana Pawła II 24, 60-965 Poznań

**Prerequisites** 

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## **Course objective**

The aim of the course is to familiarize students of Biomedical Engineering with the basic problems of bioethics. The subject of this interdisciplinary lecture includes, among others, the issues of conducting biological research and experiments, in particular medical ones: both with the participation of humans and animals, as well as human impact and responsibility for changes in the natural environment. Problems related to borderline problems of origination and the end of life will be discussed. Theoretical considerations regarding bioethics as well as specific legal regulations in this area will be presented.

# **Course-related learning outcomes**

Knowledge

1. The student should present the division of bioethics and its main issues

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- 2. The student should know the basic ethical aspects of biomedical engineering
- 3. the student knows the ethical standards related to the conduct of experiments with humans and animals, has knowledge of environmental ethics

Skills

- 1. The student is able to obtain information on bioethics from commonly available literature resources
- 2. The student is able to recognize ethical problems related to biomedical engineering

Social competences

- 1. The student is aware of the importance of non-technical aspects of engineering activities
- 2. The student is able to correctly identify and resolve the dilemmas related to the profession

#### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Completion of the lecture based on the points obtained during the test and during the activity in the classroom

Passing requires more than 50% of points:> 50% - 3.0,> 60% - 3+,> 70% - 4,> 80% - 4+,> 90% of points - 5.0

#### **Programme content**

- 1. Introduction to basic issues related to ethics and bioethics, presentation of the historical development of the field, introduction of basic concepts and concepts.
- 2. Moral issues concerning the beginning of life
- 3. Moral issues related to the performance of professions related to medical care
- 4. Ethical problems of conducting experiments on humans and animals
- 5. Issues related to genetic engineering and other types of interference in the natural development of living organisms
- 5. End-of-life issues: euthanasia, death penalty, suicide
- 6. Human attitude towards the surrounding world
- 7. Legal aspects of bioethical problems.

# **Teaching methods**

Traditional lecture or webinar with the use of multimedia presentations

#### **Bibliography**

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#### Basic

- K. Szewczyk, Bioetyka, tom 1 Medycyna na granicach życia, PWN, Warszawa, 2009
- K. Szewczyk, Bioetyka, tom 2 Pacjent w systemie opieki zdrowotnej, PWN, Warszawa, 2009
- W. Galewicz, Antologia bioetyki, Tomy 1 -6, Universitas
- P. Singer, Etyka praktyczna, Książka i Wiedza, Warszawa 2007

#### Additional

T. L. Beauchamp, J. F. Childress, Zasady etyki medycznej, Książka i Wiedza, Warszawa 1996.

## Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,0
Classes requiring direct contact with the teacher	15	1,0
Student's own work (literature studies, preparation for	60	2,0
laboratory classes/tutorials, preparation for tests/exam, project		
preparation) <sup>1</sup>		

3

<sup>&</sup>lt;sup>1</sup> delete or add other activities as appropriate