Politechnika Warszawska

KARTA PRZEDMIOTU OFEROWANEGO W SZKOLE DOKTORSKIEJ

Code of the course	4606-EW-0000000-0184	Name of the course	Polish	Etyczne aspekty badań technonaukowych
			English	Ethical aspects of technoscientific research
Type of the course	Researcher's workshop (*warsztat badacza*)			
Course coordinator	prof. dr. hab. Roman Z. Morawski			
Implementing unit	Doctoral School	Scientific discipline / disciplines*		

Level of education	Doctoral Program	Semester	Winter and summer semesters		
Language of the course	English				
Type of assessment:	Credit with grade	Number of hours in a semester	20	ECTS credits	2
Minimum number of participants	10	Maximum number of participants	60	Available for students (BSc, MSc)	yes

Type of classes		Lecture	Auditory classes	Project classes	Laboratory	Seminar
Number of hours	in a week					
	in a semester	10	10 (tutorials & tests)			

1. Prerequisites

Prior participation in the course EMATR is recommended.

2. Course objectives

The course is aimed at the development of intellectual skills necessary for consideration of ethical issues related to research practice, especially the skills necessary for resolving ethical dilemmas related to research activities, as well as at providing basic information concerning moral philosophy and research ethics.

3. Course content (separate for each type of classes)

Lecture

- ***Basic concepts of moral philosophy*****:** morality, ethics and metaethics, moral values and moral dilemmas, monistic approaches to ethics, principles of moral decision-making.
- ***General issues of research ethics*****:** typology and aetiology of research misconduct, evolution of research ethics, ethical aspects of choosing research problems and methods.
- ***Ethical aspects of experimentation*****:** typology of experiment-related misconduct, experimentation with involvement of humans and animals, acquisition and processing of experimental data, technical infrastructure of experimentation.
- ***Ethical aspects of information processing*****:** scientific discussion, publication of research results, reviewing practice, research grant applications.

Auditory classes

- Class tutorials have the form of discussions, animated by the Ph.D. students, devoted to the following topics: ethical dilemmas related to experimentation (Class Tutorial #1), ethical dilemmas related to data processing and publication (Class Tutorial #2), and ethical issues related to new technologies (Class Tutorial #3).
- Class Test #1 (and its make-up option Test #1') is covering the material of the first parts of the lecture, v*iz. Basic concepts of moral philosophy* and *General issues of research ethics;* Class Test #2 (and its make-up option Test #2') is covering the material of the last parts of the lecture, v*iz. Ethical aspects of experimentation* and *Ethical aspects of information processing.*

4. Learning outcomes			
	Learning outcomes description	Reference to the learning outcomes of the WUT DS	Learning outcomes verification methods*
Wiedza			
W01	A Ph.D. student, who passed the course, is expected to have elementary knowledge concerning basic concepts of general ethics and ethical aspects of principal research activities.	SD_W1 SD_W4	[kolokwia pisemne] Class Tests #1 & #1'
W02	A Ph.D. student, who passed the course, is expected to have elementary knowledge concerning ethical issues concerning experimentation and ethical issues concerning information processing.	SD_W1 SD_W4	[kolokwia pisemne] Class Tests #2 & #2'
Umiejętności			
U01	A Ph.D. student, who passed the course, is expected to be able to identify and analyse ethical issues related to research activities and to discuss ethical issues related to research practice.	SD_U5 SD_U6	[kolokwia pisemne] Class Tests #2 & #2' [ocena aktywności w trakcie zajęć] Class Tutorials #1 – #3
Kompetencje społeczne			
K01	A Ph.D. student, who passed the course, is expected to be more sensitive to moral values related to scientific research and to be better prepared for resolving dilemmas that appear in research practice.	SD_K3 SS_K5	[ocena aktywności w trakcie zajęć] Class Tutorials #1 – #3

* dozwolone sposoby weryfikacji efektów uczenia się: egzamin; egzamin ustny; kolokwium pisemne; kolokwium ustne; ocena projektu; ocena sprawozdania; ocena raportu; ocena prezentacji; ocena aktywności w trakcie zajęć; prace domowe; test

5. Assessment criteria

Partial grading:

Class Test #1	up to 35 pts
Class Test #2	up to 45 pts
Class Tutorials	up to 20 pts (for animation of class discussion)

Final grading:

$0 \leq \sum pts < 50$	→ 2
$50 \leq \sum pts < 60$	→ 3
$60 \leq \sum pts < 70$	→ 3.5
$70 \leq \sum pts < 80$	→ 4
$80 \leq \sum pts < 90$	→ 4.5
$90 \leq \sum pts \leq 100$	→ 5

6. Literature

Literatura podstawowa:

[1] Lecture notes updated for each realisation of the course.
[2] R. Z. Morawski, *Technoscientific Research: Methodological and Ethical Aspects*, Walter de Gruyter, Berlin – Boston 2019, Chapters 11–20.

Literatura uzupełniająca:

Documents in the PDF and MP3 formats, fit to the needs of class tutorials, specific for each realisation of the course.

7. PhD student's workload necessary to achieve the learning outcomes**		
No.	Description	Number of hours
1	Hours of scheduled instruction given by the academic teacher in the classroom	20
2	Hours of consultations with the academic teacher, exams, tests, etc.	
3	Amount of time devoted to the preparation for classes, preparation of presentations, reports, projects, homework	20
4	Amount of time devoted to the preparation for exams, test, assessments	16
	Total number of hours	**60**
	ECTS credits	**2**

** 1 ECTS = 25-30 hours of the PhD students work (2 ECTS = 60 hours; 4 ECTS = 110 hours, etc.)