



COURSE CARD

1. Basic information

Course name in English:	Ethical and legal aspects of scientific activity	
Course name in Polish:	Aspekty etyczne i prawne działalności naukowej	
Number of hours:	15	
Type of course:	Soft skills course	
Form of course:	lecture	
Code of course:	W08000-SD0087W / DHQ100307W	
Course leader:	<i>Dr.hab. Adriana Merta-Staszczak, prof. uczelni</i>	
Faculty of the course leader:	W8 Faculty of Management	
Email address of the course leader:	Adriana.merta-staszczak@pwr.edu.pl	
Scientific discipline(s) assigned to the course (doctoral students representing the marked disciplines can participate in the course):	Architecture and urban planning	<input checked="" type="checkbox"/>
	Automation, electronic, and electrical engineering	<input checked="" type="checkbox"/>
	Information and communication technology	<input checked="" type="checkbox"/>
	Biomedical engineering	<input checked="" type="checkbox"/>
	Chemical engineering	<input checked="" type="checkbox"/>
	Civil engineering and transport	<input checked="" type="checkbox"/>
	Mechanical engineering	<input checked="" type="checkbox"/>
	Environmental engineering, mining, and energy	<input checked="" type="checkbox"/>
	Mathematics	<input checked="" type="checkbox"/>
	Chemical sciences	<input checked="" type="checkbox"/>
	Physical sciences	<input checked="" type="checkbox"/>
	Management and quality studies	<input checked="" type="checkbox"/>

2. Objectives

Analysis of the importance and role of ethics and law in scientific research

Creative resolution of problems related to social responsibility towards the environment

Showing and analyzing scientific research that may have ethical or legal issues

Sensitizing students to ethical and legal problems in science

3. Content

Detailed information about the course content, including topics and form of classes.

No.	Topic	Number of hours	Form of classes
1	Ethical and legal aspects of scientific research - introduction	1	lecture



2	Ethical activities in selected economic areas	2	lecture
3	Research ethics	2	lecture
4	Honesty and credibility in science	2	lecture
5	University Social responsibility	1	lecture
6	The problem of personal data protection in scientific research	1	lecture
7	Copyright and freedom of scientific research Rules for using someone else's songs	2	lecture
8	Co-authored works. Contracts for research and development	2	lecture
9	Industrial property law (patents, industrial designs, utility models)	2	lecture

4. Prerequisites

List of prerequisites relating to knowledge, skills and other competences for course participants.

Skills of the interpret the text

Basic skills in analysis and synthesis

5. Learning outcomes

List of learning outcomes at level 8 of the Polish Qualifications Framework assigned to the course (mark the learning outcomes in the last column).

Symbol	Learning outcome	
	<i>KNOWLEDGE. Doctoral student knows and understands:</i>	
SzD_W3	the main trends in the development of the scientific or artistic disciplines covered in the curricula;	<input type="checkbox"/>
SzD_W4	research methodology;	<input type="checkbox"/>
SzD_W5	the rules for the dissemination of scientific results, including in open access mode;	<input type="checkbox"/>
SzD_W6	the fundamental dilemmas of modern civilization;	<input type="checkbox"/>
SzD_W7	the legal and ethical conditions of scientific activity;	<input checked="" type="checkbox"/>
SzD_W8	the economic and other relevant conditions of scientific activity;	<input type="checkbox"/>
SzD_W9	basic principles of knowledge transfer to the economic and social spheres and commercialisation of results of scientific activity and know-how related to these results.	<input type="checkbox"/>
	<i>SKILLS. Doctoral student is able to:</i>	
SzD_U2	use knowledge from different fields of science or art to creatively identify, formulate and innovatively solve complex problems or perform research tasks, in particular: - define the purpose and subject of scientific research, formulate a research hypothesis,	<input type="checkbox"/>



	- develop research methods, techniques and tools, and use them creatively, - draw conclusions on the basis of scientific research; critically analyse and evaluate the results of scientific research, expertise and other creative work and their contribution to knowledge development; transfer the results of scientific activities to the economic and social spheres;	
SzD_U3	communicate on specialised topics to the extent that they enable an active participation in the international scientific community;	<input type="checkbox"/>
SzD_U4	disseminate research results, including in popular forms;	<input type="checkbox"/>
SzD_U5	initiate debates and participate in a scientific discourse;	<input type="checkbox"/>
SzD_U6	be able to speak a foreign language at B2 level of the Common European Framework of Reference for Languages to a level that enables them to participate in the international scientific and professional environment;	<input type="checkbox"/>
SzD_U7	plan and implement an individual or collective research or creative activity, including in an international environment;	<input type="checkbox"/>
SzD_U8	independently plan and act for one's own development and inspire and organize the development of others;	<input type="checkbox"/>
SzD_U9	plan classes or groups of classes and implement them using modern methods and tools.	<input type="checkbox"/>
<i>SOCIAL COMPETENCES. Doctoral student is ready to:</i>		
SzD_K3	fulfilling the social obligations of researchers and creators, initiate public interest activities, thinking and acting in an entrepreneurial way;	<input checked="" type="checkbox"/>
SzD_K4	maintaining and developing the ethos of research and creative environments, including: - carrying out scientific activities in an independent manner, - respecting the principle of public ownership of research results, taking into account the principles of intellectual property protection.	<input checked="" type="checkbox"/>

6. Evaluation

Short description of the method(s) used to evaluate the learning outcomes assigned to the course, e.g., exam, test, report, presentation, etc.

Presentation
Activity
discussion

7. Teaching methods

Short description of the teaching methods used during the course, e.g., multimedia presentation, discussion, literature studies, developing written documents, own work, etc.

Informative lecture
Interactive lecture
Multimedia presentation
Case study



8. Literature

List of primary and secondary literature used to prepare the course and including additional knowledge for participants, e.g., books, textbooks, research papers, standards, web pages, etc.

- [1] Etyka u schyłku drugiego tysiąclecia, pod. red. J. Ziobrowski, Warszawa 2013.
- [2] Etyczne i prawne granice badań naukowych, pod. red. W. Galewicz, Kraków 2009.
- [3] W. Gasparski, Biznes, etyka, odpowiedzialność, Warszawa 2012.
- [4] S. Krimsky, Nauka skorumpowana, Warszawa 2006.
- [5] Prawo autorskie i prawa pokrewne. Prawo prasowe. Ustawa o zwalczaniu nieuczciwej konkurencji. Przepisy, Warszawa 2019 (Wolters Kluwer)
- [6] J. Barta, R. Markiewicz, Prawo autorskie i prawa pokrewne. Przewodnik po polskim i międzynarodowym prawie autorskim, Warszawa 2019.
- [7] A. Nowak-Gruca, Własność intelektualna w przedsiębiorstwie, Warszawa 2018.
- [8] E. Nowińska, U. Promińska, K. Szczepanowska-Kozłowska, Własność przemysłowa i jej ochrona, Warszawa 2014.
- [9] *Maciej W. Grabski, Uczciwość i wiarygodność nauki. Praktyka, Nauka 2/2009, s.37-59*
- [10] *E. Babbie, Podstawy badań społecznych, Warszawa 2009.*
- [11] R. Markiewicz, Zabawy z prawem autorskim, Warszawa 2015.
- [12] P. Stec (red.), Komercjalizacja wyników badań naukowych, Warszawa 2017.
- [13] M. Salamonowicz, Treść i charakter prawny umowy o prace badawczo-rozwojowe, Warszawa 2018.

9. Other remarks

Additional remarks, comments, (e.g., language of the course)