COURSE OFFERED

Name of the	Polish	Komunikacja naukowa
course	English	Science communication

1. LOCATION OF THE COURSE OF STUDY WITHIN THE EDUCATION SYSTEM

1.1. Section ¹	Exact and Natural Sciences	
1.2. Discipline ²	Biological Sciences	
1.3. Type of education	Stationary	
1.4. Level of education	Doctoral School	
1.5. Person preparing the course description	Prof. Andrzej Wójcik	
1.6. Contact	andrzej.wojcik@ujk.edu.pl	

2. GENERAL CHARACTERISTICS OF THE COURSE OF STUDY

2.1. Type of course ³	specialized subjects in the discipline				
2.2. Language of the course	English				

3. DETAILED CHARACTERISTICS OF THE COURSE OF STUDY

3.1. Type of classes ⁴		Exercises					
3.2. The number of hours ⁵		10h					
3.3. Location of classes		Classes in the UJK teaching room					
3.4. Type of ass	essment	Pass with grade					
3.5. Didactic me	ethods	discussion					
3.6. Literature	basic	https://en.wikipedia.org/wiki/Science communication					
		https://www.pnas.org/doi/full/10.1073/pnas.1317504111					
	supplementary	https://link.springer.com/article/10.1007/s00411-018-0763-4					
		https://pubmed.ncbi.nlm.nih.gov/32463798/					
		https://www.google.com/url?sa=t&source=web&rct=j&opi=8					
		9978449&url=https://www.ipcc.ch/site/assets/uploads/2018					
		<u>/05/uncertainty-guidance-</u>					
		note.pdf&ved=2ahUKEwjy4JTRuM6PAxUcExAIHQZsIR8QFnoE					
		CAsQAQ&usg=AOvVaw3qMhHmFhglB 7FUPqTHH9					

¹ Section of Humanities:, Social Sciences, Section of Exact and Natural Sciences, Section of Medical and Health Sciences, Section of Arts.

² History, Linguistics, Literary Studies, Medical Sciences, Health Sciences, Political and Administrative Sciences, Legal Sciences, Security Sciences, Pedagogy, Communication and Media Studies, Management and Quality Studies, Biological Sciences, Chemical Sciences, Physical Sciences, Earth and related Environmental Sciences, Visual Arts and Artwork Conservation, Musical Arts.

³ General courses, domain specific subjects in the section, disciplinary subjects in the sections, specialized subjects in the discipline.

⁴ Classes, lecture, seminar.

⁵ Consistent with the education program at the Doctoral School Jan Kochanowski University in Kielce.

4. OBJECTIVES, SYLLABUS CONTENT AND INTENDEND LEARNING OUTCOMES

- 4.1. Course objectives (including the form of classes)
- C1. Gaining knowledge of the problem of communicating scientific questions and research results.
- **C2.** Training in communicating scientific questions and research results.
- 4.2. Syllabus content

Lectures

- 1. The forms of communication to experts: publications and scientific meetings.
- 2. The forms of communication to laymen and stakeholders.
- 3. Communicating risks associated with exposure to carcinogens.
- 4. Communicating uncertainties related to risks.

Classes

PhD students will prepare exercises (single or in groups) where they will train presenting a research topic to experts (other scientists) and laymen.

5. SUBJECT LEARNING OUTCOMES

Learning outcomes	Ontcomes A doctoral student who has passed the subject:					
	in the area of KNOWLEDGE:					
W01	The doctoral student has advanced knowledge of teaching methodologies for conducting classes at a higher education institution.					
	in the area of SKILLS:					
U01	The doctoral student is skilled in presenting research findings or project outcomes through oral presentations and written works, adhering to methodological, copyright, and ethical principles, as well as initiating scientific debates in international project environments.	SD_U05				

U02	The doctoral student can disseminate research results or project outcomes through oral presentations and written works.	SD_U06
	in the area of SOCIAL COMPETENCE:	
K01	The doctoral student can critically analyze their own contribution to the development of the discipline in which the doctoral dissertation is being prepared, as well as evaluate the scientific, or project-related achievements of other researchers, or in the same discipline.	SD_K04
K02	The doctoral student can independently conduct scientific research or project activities, adhering to the principles of public ownership of research results or project outcomes and ensuring intellectual property protection.	SD_K05

6. METHODS OF ASSESSMENT OF THE INTENDED LEARNING OUTCOMES

							M	ETH	OD	OF A	ASSE	SSN	/EN	T (+	/-)						
SUBJECT		Oral/writte n exam			Test			Project		activity in class		Own work		Group work			Others				
LEARNING OUTCOMES		The type The typ of of classes classes		_	The type of classes		The type of classes		The type of classes		The type of classes		The type of classes								
	L	Ε	S	L	Ε	S	L	Ε	S	L	Ε	S	L	Ε	S	L	Ε	S	L	Ε	S
W01					+			+			+			+			+				
U01					+			+			+			+			+				
U02					+			+			+			+			+				
K01					+			+			+			+			+				•
K02					+			+			+			+			+				

7. CRITERIA OF ASSESSMENT OF THE INTENDED LEARNING OUTCOMES

Form of classes	Grade	Criteria of assessment
	3.0	Achieved 51-60% possible points from test, project, activity, own work and group work
(E) 7	3.5	Achieved 61-70% possible points from test, project, activity, own work and group work
Exercises	4.0	Achieved 71-80% possible points from test, project, activity, own work and group work
Exel	4.5	Achieved 81-90% possible points from test, project, activity, own work and group work
	5.0	Achieved 91-100% possible points from test, project, activity, own work and group work

Accepted for execution		

- ⁶ Niepotrzebne usunąć.
- ⁷ Niepotrzebne usunąć.