THE DOCTORAL SCHOOL OF IPPT PAN

COURSE OFFERED IN THE DOCTORAL SCHOOL OF IPPT PAN

Name of the course	Polish	**Pisanie naukowe i skuteczne prezentowanie wyników badań**				
	English	**Scientific writing and effective speaking for PhD students**				
Type of the course	**Specialized course**					
Course coordinator	**Mateusz Kopec, PhD, DSc**		Course teacher	Mateusz Kopec, PhD, DSc		
Implementing unit	**ZMD**	Scientific discipline / disciplines	**multidisciplinary**			
Level of education	**Doctoral school**	Semester	**summer or winter**			
Language of the course	**English**					
Type of assessment	**exam**	Number of hours in a semester	**30**	ECTS credits	**4**	

Type of classes		Lecture	Auditory classes	Project classes	Laboratory	Seminar
Number of hours	in a week	**2**	**2**			
	in a semester	**20**	**10**			

1. Prerequisites

Basic knowledge of scientific research methodology and English language proficiency at the B2 level.

2. Course objectives

The objective of the course is to equip doctoral students with the skills necessary for effective scientific writing and efficient presentation of research results in an international academic environment.

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

Lecture

1. Introduction to scientific writing
1.1 Why write and publish?
1.2 Literature review
1.3 Planning and conducting research with publication in mind
1.4 What does an editor look for?
2. Structure and organization of a scientific paper
2.1 Standard structure of a scientific paper
2.2 Abstract
2.3 Introduction
2.4 Methods
2.5 Results and Discussion
2.6 Conclusions
3. Proper presentation of figures and tables
3.1 The purpose of using figures
3.2 Common errors in graphs
3.3 Graphical integrity
4. Working on your own paper – project
5. How to effectively deliver a presentation to a specific audience

Laboratory
1. Preparing an individual scientific paper 2. Delivering a presentation for a scientific conference

4. Learning outcomes			
Number of the learning outcome	Learning outcomes description	Reference to the learning outcomes according to the 8th level of PRK	Learning outcomes verification methods*
Knowledge			
1	The doctoral student knows and understands the principles of disseminating research results.	P8S_WG	active participation during classes
2	Knows and understands the economic, legal, and ethical aspects of scientific publishing.	P8S_WK	active participation during classes
Skills			
1	Is able to document and present research findings in written and oral form.	P8S_UW	Exam
2	Can critically analyze and evaluate research results and the achievements of their discipline, as well as their own contribution to its development.	P8S_UW	active participation during classes and exam
3	Is capable of developing new problem-solving approaches within existing and modified methodological paradigms, creatively applying and improving research methods, techniques, and tools appropriate for their studies, and drawing conclusions based on research results.	P8S_UW	active participation during classesand exam
Communication			
1	Is able to use a foreign language at the B2 level in a scientific context.	P8S_UK	active participation during classes and exam
2	Can initiate scientific debate and participate in international academic discourse.	P8S_UK	active participation during classes
Social competences			
1	Is ready to critically assess scientific achievements and their own contributions.	P8S_KK	active participation during classes
2	Respects the principles of scientific ethics and intellectual property protection.	P8S_KR	active participation during classes

*Allowed learning outcomes verification methods: exam; oral exam; written test; oral test; project evaluation; report evaluation; presentation evaluation; active participation during classes; homework; tests

5. Assessment criteria
active participation during classes, exams

6. Literature
Primary references:
[1] Chris A. Mack - How to Write a Good Scientific Paper
[2] David Lindsay – Scientific writing=Thinking in words
Secondary references:
[1] Alley, M. - The Craft of Scientific Writing
[2] Glasman-Deal, H. - Science Research Writing for Non-Native Speakers of English

7. PhD student's workload necessary to achieve the learning outcomes**		
No.	Description	Number of hours
1	Hours of scheduled instruction given by the lecturer in the classroom	**30**
2	Hours of consultations with the lecturer, exams, tests, etc.	**15**
3	Amount of time devoted to the preparation for classes, preparation of presentations, reports, projects, homework	**25**
4	Amount of time devoted to the preparation for exams, test, assessments	**35**
	Total number of hours	**105**
	ECTS credits	**4**

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