COURSE OFFERED

Name of the	Polish	Analiza statystyczna danych
course	English	Statistical data analysis

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

1.1. Section ¹	Exact and Natural Sciences
1.2. Discipline ²	Physical Sciences
1.3. Type of education	Stationary
1.4. Level of education	PhD School/1 year
1.5. Person preparing the course	Francesco Giacosa
description	
1.6. Contact	fgiacosa@ujk.edu.pl

2. GENERAL CHARACTERISTICS OF THE COURSE OF STUDY

2.1. Type of course ³	Domain specific subjects in the section
2.2. Language of the course	English

3. DETAILED CHARACTERISTICS OF THE COURSE OF STUDY

3.1. Type of clas	sses ⁴	Lectures and excercises							
3.2. The numbe	r of hours⁵	20							
3.3. Location of	classes	UJK, WNSIP							
3.4. Type of ass	essment	Zaliczenie z oceną							
3.5. Didactic me	ethods	Oral lectures, problem solving							
3.6. Literature	basic	Sidney Siegel -							
		Nonparametric statistics for the behavioral sciences -							
		McGraw-Hill (1956)							
		John R. Taylor,							
		An Introduction to Error Analysis:							
		The Study of Uncertainties in Physical Measurements,							
		ISBN-13: 978-0935702750							
		Arak M. Mathai and Hans I. Haubold							
		Drobability and Statistics							
		De Gruyter Textbook							
	supplementary	Probability and statistics, in mathematical tools of the							
		Particle Data Group, http://pdg.lbl.gov/2015							
		Hans Bandemer, Mathematics of Uncertainty, ISBN 978-3-							
		540-31228-4							

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)

Understanding the fundamentals aspects of statistical methods: fits, calculation of the parameter errors and determination of the quality of fits.

Understanding the mathematical tools related to statistics.

Developing the skills to solve exercises.

4.2.Syllabus content

- 1. Recall of error propagation and error analysis.
- 2. Distributions: Gaussian, binomial, Poisson.
- 3. Statistical and systematic errors.
- 4. Errors and significant digits.
- 5. Fit: determination of the parameters, statistical tests.
- 6. t-student, Anova.

5. SUBJECT LEARNING OUTCOMES

Learning outcomes	A doctoral student who has passed the subject:								
W01	W01 The doctoral student has expanded knowledge of research methodologies, including statistical analysis of results.								
in the area of SKILLS:									
U02	The doctoral student can create a research plan, including advanced research procedures and an original research.	SD_UO2							
in the area of SOCIAL COMPETENCE:									
К03	The doctoral student can independently conduct scientific research, adhering to the principles of public ownership ofresearch results outcomes and ensuring intellectualproperty protection.	SD_K05							

6. METHODS OF ASSESSMENT OF THE INTENDED LEARNING OUTCOMES

	METHOD OF ASSESSMENT (+/-)																				
	Ora	l/wı	ritte	Kolokwiu			Project			activity in class			Own work			G	irou	р	Othors		;
SUBJECT	n	еха	m	m		work										others					
LEARNING	The type			The type		The type		The type		The type			The type			The type					
OUTCOMES	of			of		of		of		of		of			of						
	classes			classes			classes			classes			classes			classes			classes		
	L	С	S	L	С	S	L	С	S	L	С	S	L	С	S	L	С	S	L	С	S
W01	x	x																			

U01	x	x										
K01	x	x										

7. CRITERIA OF ASSESSMENT OF THE INTENDED LEARNING OUTCOMES

Form of classes	Grade	Criterion of assessment
9	3,0	51-60% correct exam exercises
(r)	3,5	61-70% correct exam exercises
rre	4,0	71-80% correct exam exercises
ecti	4,5	81-90% correct exam exercises
Ľ	5,0	91-100% correct exam exercises

Accepted for execution

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⁶ Niepotrzebne usunąć.