Course title:	Statistics in a spreadsheet and using online calculators
Course title in Polish:	Statystyka w arkuszu kalkulacyjnym i z wykorzystaniem kalkulatorów online
Course for discipline:	

Semester:	8	**Status of course:**	faculty	**Language:**	english
Academic year:		**Catalog number:**			

Coordinator of course:	dr hab. Elżbieta Wójcik-Gront, prof. SGGW		
Lecturer od course:	dr hab. Elżbieta Wójcik-Gront, prof. SGGW		
Executing unit:	Department of Biometry, Institute of Agriculture		
Ordering unit:	Doctoral School SGGW		
Assumptions, goals and description of the course:	Repetition, completion, and extension of knowledge and skills in the statistical analysis of natural data in spreadsheets and online calculators.		
Didactic form, number of hours:	10 of practicals with theoretical introduction.		
Teaching methods:	Work on computers using spreadsheets and online calculators.		
Limit of people in the group:	15		
Learning outcomes			
KNOWLEDGE - the graduate knows and understands:	**SKILLS - the graduate is able to:**	**COMPETENCES - the graduate is ready to:**	
To the extent enabling to revise the existing pradigms in the field/discipline - the world achievments, gathering theoretical background as well as general and selected detailed issues	Carry out critical assessment of the scientific research findings and expert activities and their contribution to the knowledge development in the field/discipline	Critically evaluate the achievments in the field/discipline represented	
Major general development trends in the field/discipline		Recognise knowledge in solving cognitive and practical problems characteristic for the area of research (field/discipline) and in an interdisciplinary aspect	
		Support the ethos of scientific circles and conduct independent research	
The method of verification of learning outcomes:	One homework		
Form of documentation of achieved learning outcomes:	The file with the homework.		
Elements and weights of the final grade:	The file with the homework, 100% score.		
Place of the course:	Computer classes of Department of Biometry.		
Basic and supplementary literature			
C. Dytham, Choosing and Using Statistics: A Biologist's Guide John Wiley & Sons Inc, 2010 B. Illowsky, S. Dean, Introductory Statistics, 2018. Open Access Textbooks. J C Touchon, Applied Statistics with R: A Practical Guide for the Life Sciences 2021 Oxford University Press, J Schmuller Statistical Analysis with Excel For Dummies 2022 M Çetinkaya-Rundel, J Hardin Introduction to Modern Statistics OpenIntro G Tsige Introduction to Statistics 2012 OmniScriptum GmbH & Co. KG			
Comments:			

Estimated number of hours of work of the doctoral student necessary to achieve the assumed learning outcomes:	

Leraning outcomes reference to the second degree characteristics of the National Qualification Framework (level 8) covering doctoral competences:		
Symbol:	**Learning outcomes:**	**8 level NQF**
SD1_KW01	To the extent enabling to revise the existing pradigms in the field/discipline - the world achievments, gathering theoretical background as well as general and selected detailed issues	P8S_WG
SD1_KW02	Major general development trends in the field/discipline	P8S_WG
SD1_KU05	Carry out critical assessment of the scientific research findings and expert activities and their contribution to the knowledge development in the field/discipline	P8S_UW
SD1_KK01	Critically evaluate the achievments in the field/discipline represented	P8S_KK
SD1_KK03	Recognise knowledge in solving cognitive and practical problems characteristic for the area of research (field/discipline) and in an interdisciplinary aspect	P8S_KK
SD1_KK08	Support the ethos of scientific circles and conduct independent research	P8S_KR