Course title:	Data processing and presentation techniques
Course title in Polish:	Techniki przetwarzania i prezentacji danych
Course for discipline:	Agriculture and Horticulture

Semester:	7	**Status of course:**	faculty	**Language:**	english
Academic year:		**Catalog number:**			

Coordinator of course:	Dr. Jarosław Leon Przybył
Lecturer od course:	Dr. Jarosław Leon Przybył
Executing unit:	Institute of Horticultural Sciences, Department of Vegetable and Medicinal Plants
Ordering unit:	Doctoral School SGGW
Assumptions, goals and description of the course:	Mastering the knowledge and skills required to process research or experimental data, and present substantive content and conclusions clearly and understandably. This includes: - Processing and presentation of numerical data - Practical use of advanced spreadsheet functions - Raster graphics processing: image acquisition and the practical use of software for preparing photographs and images to illustrate research results - Vector (object) graphics processing: data import and export, and the practical use of software for preparing illustrations, diagrams and schematics - Elements of typography: principles for preparing a communicative and easy-to-read text - Elements of information design: principles for preparing clear visual messages (diagrams, schematics, instructions and graphic abstracts) - Preparation of publications for print: the practical use of advanced editing and typesetting programme functions - Preparing content/publications for presentation on screen - Practical use of advanced programme functions for creating multimedia presentations - Preparing content/publications for presentation on the internet
Didactic form, number of hours:	10 hours
Teaching methods:	discussion, project, problem solving, experience/experiment, case study, analysis and interpretation of source texts, individual student projects, consultation
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:	Project and Essay
Form of documentation of achieved learning outcomes:	Project and Essay, as well as a personal evaluation sheet.
Elements and weights of the final grade:	Final assessment: The evaluation of the learning outcomes consists of the following: 1. Project; 2. Essay. A maximum of 100 points can be obtained for each element. Weighting of each element: 1 – 50%, 2 – 50%. The final mark is the sum of the points obtained for each element, taking into account its weighting. A minimum score of 51% is required to pass.
Place of the course:	Teaching room; online classes possible

Basic and supplementary literature

- Todd Rogers and Jessica Lasky-Fink, Writing for Busy Readers: Communicate More Effectively in the Real World, Scribe Publications, 2023.
- Richard Poulin, Language of Graphic Design (Revised and Updated), Rockport Publishers, Inc., 2021.
- Tony Seddon and Jane Waterhouse, Graphic Design for Non-Designers, Rotovision S.A., 2009.
- Cyrus Highsmith, Inside Paragraphs: Typographic Fundamentals, Princeton University Press, 2020.
- David McCandless, Knowledge is Beautiful, HarperCollins, 2014.
- Victoria Squire and Hans Peter Willberg, Getting it Right with Type: The Do's and Don'ts of Typography, Laurence King Publishing, 2006.
- Adrian Frutiger, Signs and Symbols: Their Design and Meaning, Studio Editions, 1991.
- Adrian Frutiger, 'Typefaces', Birkhäuser Berlin, 2021.

Comments:	

Estimated number of hours of work of the doctoral student necessary to achieve the assumed learning outcomes:	10

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