DOCTORAL SCHOOL OF WROCŁAW UNIVERSITY OF SCIENCE AND TECHNOLOGY

SUPERVISOR/TEAM/ DECLARING/CONDUCTING COURSE: Jacek Kasperski
DEPARTMENT: Faculty of Mechanical and Power Engineering W9
SCIENTIFIC DISCIPLINE: Environmental Engineering, Mining and Energy

COURSE CARD

Course name in Polish: Sposoby graficznej prezentacji wyników badań naukowych
Course name in English: Metods of graphical presentation of results of scientific research
Course language Polish / ~~English*~~
University-wide general course type*:
The course is intended for all PhD students: YES / NO
~~1) BASIC COURSE~~
2) SPECIALIST COURSE
~~3) SEMINAR~~
~~4) HUMANISTIC COURSE~~
~~5) LANGUAGE~~

Subject code: IGQ000005W

* delete as applicable

	Lecture	Foreign language course	Seminar	Mixed forms
Number of hours of organized classes in university (ZZU)	30			
Grading	Exam	Exam	Oral presentation	Exam, inspection, evaluation classes
Number of ECTS points	**0**			

PREREQUISITES RELATING TO KNOWLEDGE, SKILLS AND OTHER COMPETENCES

1. not required

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COURSE OBJECTIVES
C1 - acquainting PhD students with the PWr logo, its requirements and application
C2 - acquainting doctoral students with recommendations and typical errors in PowerPoint presentations
C3 - acquainting doctoral students with the properties and intended use of various graphic files
C4 - acquainting doctoral students with the methods of creating and processing graphics and photographs as well as computer tools
C5 - acquainting doctoral students with recommendations regarding graphic materials in scientific publications

PROGRAM CONTENTS

DOCTORAL SCHOOL OF WROCŁAW UNIVERSITY OF SCIENCE AND TECHNOLOGY

Form of classes – lecture (Lec)		Number of hours
Lec1	Introduction	2
Lec2	WUST Logotype and its importance	2
Lec3	Projector presentation	2
Lec4	Data coding and compresion for bmp, gif, tif, jpg, png files	2
Lec5	Color coding: rgb, cmyk, conversion	2
Lec6	Optical resolution dpi	2
Lec7	Commercial and free grafical software (Excell, Origin, Corel, Inkscape, etc.)	2
Lec8	Photographic properties and processing	2
Lec9	Image cropping, cutting	2
Lec10	Animation creation	2
Lec11	Imaging of space, distortion	2
Lec12	Graphical distinguishing of data	2
Lec13	Infographics	2
Lec14	Examples of graphics in scientific publications	2
Lec15	Grafical abstract	2
	Total hours:	

TEACHING TOOLS USED
N1. Lecture   N2. Consultations

ACHIEVED SUBJECT LEARNING OUTCOMES		
Type of learning outcome	Code of learning outcome	Assessment of learning outcome
Knowledge	P8S_WG	- has advanced knowledge in the area of major subjects from a given discipline or interdisciplinary subjects
Skills	P8S_UW	- can creatively interpret the obtained results and seek their application

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PRIMARY AND SECONDARY LITERATURE

PRIMARY LITERATURE:

[1]   E. R. Tufte, *The Cognitive Style of PwerPoint Out corrupts Within,* Graphics Press LLC, Cheshirte, Connecticut, 2006

SECONDARY LITERATURE:

[1]   R. C. Gonzalez, R. E. Woods, *Digital image Processing,* Prentice Hall, New Jersey 2002

[2]   A. Cairo, The Functional Art.: *An introduction to information graphics and visualization (voices That Matter),* New Reders, Berkeley 2013

[3]   F. C. Frankel, A. H. DePace, *Visual Strategies,* Yale University Press, London 2012

[4]   J. Bertin, *Semiology of Graphics: diagrams, Networks, Maps,* The University of Wisconsin Press, Medison 2011

[5]   S. Few, *Show Me the Numbers: Designing Tables and Graphs to Enlighten,* analytics Press, Burlingame, California 2012

[6]   E. R. Tufte, *The Visual Display of Quantitative Information,* Graphics Press LLC, Cheshirte, Connecticut 2014

[7]   S. Few, *Now You See It: Simplr=e Visualization Techniques for Quantitative Analysis, Analytics Press,* Oakland, California 2009

[8]   C. Ware, *information Visualization, Perception for design,* Elsevier, Wietnam 2013

SUBJECT SUPERVISOR (NAME AND SURNAME, E-MAIL ADDRESS)

Jacek Kasperski, jacek.kasperski@pwr.edu.pl