

**DOCTORAL SCHOOL OF WROCLAW UNIVERSITY OF SCIENCE AND
TECHNOLOGY**

SUPERVISOR DECLARING/CONDUCTING COURSE: Jacek Kasperski, PhD, DSc
DEPARTMENT: Faculty of Mechanical and Power Engineering
SCIENTIFIC DISCIPLINE: environmental engineering, mining and energy

COURSE CARD

Course name in Polish: Sposoby graficznej prezentacji wyników badań naukowych

Course name in English: Methods of graphical presentation of results of scientific research

Course language: polish/ english

The course is intended for all PhD students: YES /~~NO~~

~~1) BASIC COURSE~~

2) SPECIALIST COURSE

~~3) SEMINAR~~

~~4) HUMANISTIC COURSE~~

5) LANGUAGE

~~6) RESEARCH SKILLS~~

Subject code: IGQ100228W

* delete as applicable

	Lecture	Foreign language course	Seminar	Mixed forms
Number of hours of organized classes in university (ZZU)	15			
Grading	exam			

PREREQUISITES RELATING TO KNOWLEDGE, SKILLS AND OTHER COMPETENCES
no prerequisites

COURSE OBJECTIVES

C1 - Familiarizing students with the recommendations and common mistakes in PowerPoint presentations

C2 - Familiarizing students with the basics of perceiving differences and ways of distinguishing

C3- Familiarizing students with the properties and purpose of different types of graphs

C4 - Familiarizing students with the methods of color coding

PROGRAM CONTENTS

Form of classes		Number of hours
Le1	Introduction, presentations on a projector - good manners, typical mistakes	2

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Le2	The basics of perceiving differences, an introduction to highlighting	2
Le3	Distinguishing by shape, size, saturation, color, texture density	2
Le4	Types of charts	4
Le5	Difficult chart cases	2
Le6	Color and its coding	3
	Total hours	15

TEACHING TOOLS USED
N1. informative lecture N2. consultation

ACHIEVED SUBJECT LEARNING OUTCOMES		
Type of learning outcome	Code of learning outcome	Assessment of learning outcome
knowledge	P8S_WG	has an advanced knowledge fundamental to a field relevant to his/her research, including the most advanced methods of research and verification of results achieved
skills	P8S_UW	is able to creatively interpret the results obtained and to search for their application

PRIMARY AND SECONDARY LITERATURE
<p><u>PRIMARY LITERATURE:</u></p> <p>[1] E.R. Tufte, <i>The Cognitive Style of PowerPoint: Pitching Out Corrupts Within</i>, Graphics Press LLC, Cheshire, Connecticut, 2006</p>
<p><u>SECONDARY LITERATURE:</u></p> <p>[2] R.C. Gonzalez, R.E. Woods, <i>Digital Image Processing</i>, Prentice Hall, New Jersey 2002</p> <p>[3] A.Cairo, <i>The Functional Art: An introduction to information graphics and visualization (Voices That Matter)</i>, New Riders, Berkeley 2013</p> <p>[4] F.C.Frankel, A.H. DePace, <i>Visual Strategies</i>, Yale University Press, London 2012</p> <p>[5] J.Bertin, <i>Semiology of Graphics: Diagrams, Networks, Maps</i>, The University of Wisconsin Press, Madison, 2011</p> <p>[6] S.Few, <i>Show Me the Numbers: Designing Tables and Graphs to Enlighten</i>, Analytics Press, Burlingame, California 2012</p> <p>[7] E.R. Tufte, <i>The Visual Display of Quantitative Information</i>, Graphics Press LLC, Cheshire, Connecticut 2014</p> <p>[8] S.Few, <i>Now You See It: Simple Visualization Techniques for Quantitative Analysis</i>, Analytics Press, Oakland, California 2009</p> <p>[9] C.Ware, <i>Information Visualization, Perception for design</i>, Elsevier, Waltham, 2013</p>
<p>SUBJECT SUPERVISOR (NAME AND SURNAME, E-MAIL ADDRESS)</p> <p>Jacek Kasperski, jacek.kasperski@pwr.edu.pl</p>