DOCTORAL SCHOOL OF WROCŁAW UNIVERSITY OF SCIENCE AND TECHNOLOGY

SUPERVISOR DECLARING/CONDUCTING COURSE: dr inż. Przemysław Scherwentke FACULTY OF PURE AND APPLIED MATHEMATICS/DEPARTMENT OF PURE MATHEMATICS

COURSE CARD

Course name in Polish: Profesjonalny skład tekstu w systemie LaTeX

Course name in English: Professional preparation of documents in the LaTeX system

Course language <u>Polish</u>
3) <u>management course</u>

Subject code: MAQ100120W

	Lecture	Foreign language course	Seminar	Mixed forms
Number of hours of organized classes in university (ZZU)	30			
Grading	Exam			

PREREQUISITES RELATING TO KNOWLEDGE, SKILLS AND OTHER COMPETENCES

- 1. Basic knowledge of scientific and mathematic notation.
- 2. Computer skills.

COURSE OBJECTIVES

- C1 Obtaining knowledge of LaTeX and typesetting rules
- C2 Typesetting moderate complicated scientific texts.
- C3 Ability of transforming between documents like the report (PhD), the article, the presentation etc.
- C4 Getting to know basic programming aspects LaTeX.
- C5 Recognizing improperly typeset texts.
- C6 Recognizing subtleties carried by the proper typography, especially in an own area of interest.

PROGRAM CONTENTS

	Number of hours	
Lec1	Introduction to TeX. Error interface.	2
Lec2	Lec2 Main commands. 2	
Lec3	Lec3 Mathematical mode.	
Lec4	Lec4 Advanced structures in math mode. 2	
Lec5	Lec5 Some environments of text mode.	
Lec6 The structure of the document. Counters. Category codes (as an introduction to macros).		2

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Lec7	Some typographic rules.		2
Lec8	Basic knowledge about macros.		2
Lec9	Advanced macros, although with a structure.		2
Lec10	Graphics in LaTeX.		2
Lec11	Table of contents, index, bibliography. BibTeX.		2
Lec12	Presentations. The beamer package.		2
Lec13	S Selected LaTeX packages.		2
Lec14	Typography of a journal article and a book — practice.		2
Lec15	Practice of programming in TeX/LaTeX.		2
		Total hours:	30

TEACHING TOOLS USED

N1. Multimedia lectures.

N2. Project and discussion

ACHIEVED SUBJECT LEARNING OUTCOMES				
Type of learning outcome	Code of learning outcome	Assessment of learning outcome		
Knowledge	P8S_WK	Has organized knowledge of typesetting scientific works, including PhD thesis and journal articles		
Skills	P8S_UK	Is able to prepare and present an oral and multimedia presentation in English on the implementation of the research and to lead a discussion on the presented presentation		
Skills	P8S_UK	Shows an active attitude in preparing a scientific publication in the form of a book or in the form of a scientific publication for printing in a peer-reviewed scientific journal listed in among scientific journals published by the Minister of Science and Higher Education, or in a peer-reviewed report on an international scientific conference or a public presentation of an artistic work		
Skills	P8S_UK	Is able to prepare and make a public presentation of the results of research work, including a doctoral dissertation prepared under the supervision of a supervisor or supervisors, or an assistant supervisor and supervisor		
Social competence	P8S_KR	Is aware of the social role of the scholar		

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PRIMARY AND SECONDARY LITERATURE

PRIMARY LITERATURE:

- [1] Leslie Lamport, LaTeX. System opracowywania dokumentów. Podręcznik i przewodnik użytkownika. WNT, 2004.
- [2] Kazimierz Borkowski, LaTeX. Profesjonalny skład publikacji, 1992.
- [3] Marcin Borkowski, Bartłomiej Przybylski, LaTeX książka kucharska. Online: https://www.ptm.org.pl/latex-ksiazka-kucharska

SECONDARY LITERATURE:

- [1] Donald Knuth, TeX. Przewodnik użytkownika. WNT, 2005.
- [2] Antoni Diller, LaTeX wiersz po wierszu: zasady i techniki przetwarzania dokumentów, Helion, 2001.
- [3] Helmut Kopka, Patrick W. Daly, Guide to LaTeX, Addison-Wesley, 2003.

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

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