

WROCLAW UNIVERSITY OF TECHNOLOGY – PHD STUDIES

FACULTY OF PURE AND APPLIED MATHEMATICS
SUBJECT CARD
Course name in Polish: Profesjonalny skład tekstu w systemie LaTeX
Course name in English: Professional document preparation in the LaTeX system
Course language: English
University-wide general course type: 1) basic course (mathematics, physics, chemistry, other) 2) humanity course 3) <u>managerial skills</u> 4) English language 5) other modern language Departmental course developing professional skills: 1) specialized course 2) interdisciplinary course 3) seminar (interdisciplinary, specialized, departmental)
Type of course (obligatory, <u>optional</u>)
Educational effects according to ZW 26/2017 regulations: P8S_WG, P8S_WK, P8S_UW, P8S_KK, P8S_KR
Subject code: MAT1311

*delete as applicable

	Lecture
Number of hours of organized classes in University (ZZU)	30
Number of hours of total student workload (CNPS)	90
Form of crediting	Exam
Number of ECTS points	3
including number of ECTS points for practical (P) classes	
including number of ECTS points for direct teacher-student contact (BK) classes	2

PREREQUISITES RELATING TO KNOWLEDGE, SKILLS AND OTHER COMPETENCES

1. Basic knowledge of mathematical and engineering notation.
2. Basic computer skills.

SUBJECT OBJECTIVES

- C1 Student will acquire knowledge of the LaTeX language and typographic rules.
C2 Student will learn how to prepare moderately complicated documents.
C3. Student will acquire practice in transformations between documents like PhD thesis, a journal article, a presentation.

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SUBJECT EDUCATIONAL EFFECTS

Relating to knowledge:

PEK_W01 – Student has systematic knowledge of preparation of theses, including Ph.D. thesis and journal articles.

Relating to skills:

PEK_U01 – Student knows how to prepare a multimedia presentation in English on the implementation of research.

PEK_U02 – Student knows how to prepare scientific publications in a book form or in the form of article for publication in a peer reviewed scientific journal at national or international level, or as a reviewed report of the international scientific conference.

PEK_U03 – Student is able to prepare and make a public presentation of the results of scientific or artistic work, including his/her doctoral thesis.

Relating to social competences:

PEK_K01 – Student is aware of the role of cooperation, including an international cooperation.

PEK_K02 – Student is aware of the importance of the original research activity

PROGRAM CONTENTS

Form of classes – lecture		Number of hours
Lec 1	Introduction to TeX. Error messages.	2
Lec 2	Main commands.	2
Lec 3	Math mode.	2
Lec 4	Complex structures of math mode.	2
Lec5	Selected environments of text mode.	6
Lec6	Structure of a document. Counters. Catcodes.	2
Lec7	Selected typographic rules.	2
Lec8	Introduction to macros.	2
Lec9	More advanced macros. Structured definitions.	2
Lec10	Graphics in LaTeX.	2
Lec11	Table of contents, index, bibliography. BibTeX.	2
Lec12	Creating presentations: beamer.	2
Lec13	Selected LaTeX packages.	2
Lec14	Typography of a book and a journal article. Praxis.	2
Lec15	Praxis of programming in TeX.	2
Total hours		30

TEACHING TOOLS USED

N1	lecture with multimedia presentation
N2	project with discussions

EVALUATION OF ACHIEVED SUBJECT EDUCATIONAL EFFECTS

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Evaluation: F – forming (partial) C – concluding	Educational effect number	Way of evaluating achievement of educational effects
F1	PEK_W01, PEK_U02	exam
F2	PEK_W01, PEK_U01 PEK_U02, PEK_U03, PEK_K01, PEK_K02	project
C = 0.75*F1 + 0.25*F2		

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.

SECONDARY LITERATURE:

- [3] Donald E. Knuth, TeX. Przewodnik użytkownika. WNT, 2005.
- [4] Antoni Diller, LaTeX wiersz po wierszu: zasady i techniki przetwarzania dokumentów, Helion, 2001
- [5] Helmut Kopka, A guide to LaTeX2e: document preparation for beginners and advanced users, Addison-Wesley, 1995

SUBJECT SUPERVISOR

(NAME AND SURNAME, E-MAIL ADDRESS)

dr inż. Przemysław Scherwentke, Przemyslaw.Scherwentke@pwr.edu.pl

**MATRIX OF CORRELATION BETWEEN EDUCATIONAL EFFECTS
FOR SUBJECT
PROFESSIONAL DOCUMENT PREPARATION IN THE LATEX SYSTEM
AND EDUCATIONAL EFFECTS FOR MAIN FIELD OF STUDY
Doctoral studies at Faculty of Pure and Applied Mathematics**

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Subject educational effect	Correlation between subject educational effect and educational effects defined for main field of study and specialization (if applicable)**	Subject objectives***	Programme content***	Teaching tool number***
(knowledge) PEK_W01	P8S_WG	C1, C2, C3	Lec1-15	N1, N2
(skills) PEK_U01	P8S_UW	C1, C2	Lec1-15	N1, N2
PEK_U02	P8S_UW	C1, C2, C3	Lec1-15	N1, N2
PEK_U03	P8S_UW	C1, C2, C3	Lec1-15	N1, N2
(competences) PEK_K01	P8S_KK	C1, C2, C3	Lec1-15	N1
PEK_K02	P8S_KR	C1, C2, C3	Lec1-15	N1, N2

** - enter symbols for main-field-of-study/specialization educational effects

*** - from table above