

**FACULTY OF PURE AND APPLIED MATHEMATICS
SUBJECT CARD**

Name in Polish: Profesjonalny skład tekstu w systemie LaTeX

Name in English: Professional document preparation in the LaTeX system

Main field of study:

Specialization (if applicable):

Level and form of studies: 3rd level

Kind of subject: Interdisciplinary faculty course

Subject code: MAT1311

Group of courses: ~~TAK~~ / NIE*

	Lecture	Classes	Laboratory	Project	Seminar
Number of hours of organized classes in University (ZZU)	30				
Number of hours of total student workload (CNPS)	45				
Form of crediting	Crediting with grade*	Examination / crediting with grade*			
For group of courses mark (X) final course					
Number of ECTS points	2				
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. Acquire knowledge of the LaTeX language and typographic rules.
- C2. Obtain knowledge of preparation of intermediate complicated documents.
- C3. Practice in transformations between documents like PhD thesis, a journal article, a presentation.

SUBJECT EDUCATIONAL EFFECTS

Relating to knowledge:

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

Relating to skills:

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

PEK_U02 demonstrates proactive in preparing scientific publications in book form or in the form of article for publication in a peer reviewed scientific journal at national or international level, or in-reviewed report of the international scientific conference

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

Relating to social competences:

PEK_K01 is aware of the social role of scientist

PROGRAMME CONTENT

Form of classes - lecture		Number of hours
Lec1	Introduction to TeX. Error messages.	2
Lec2	Main commands.	2
Lec3	Math mode.	2
Lec4	Complex structures of math mode.	2
Lec5	Selected environments of text mode.	2
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 SUBJECT EDUCATIONAL EFFECTS ACHIEVEMENT

Evaluation (F – forming (during semester), P – concluding (at semester	Educational effect number	Way of evaluating educational effect achievement
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end)		
F1	PEK_W01, PEK_U02	exam
F2	PEK_W01, PEK_U01 PEK_U02, PEK_U03, PEK_K01	project
$P=0.75 \cdot F1 + 0.25 \cdot F2$		

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:

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

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

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MATRIX OF CORRELATION BETWEEN EDUCATIONAL EFFECTS FOR SUBJECT
Professional document preparation in the LaTeX system
AND EDUCATIONAL EFFECTS FOR MAIN FIELD OF STUDY

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***
PEK_W01	I3_W05	C1, C2, C3	Lec1-15	N1, N2
PEK_U01	I3_U04	C2, C3	Lec1-15	N1, N2,
PEK_U02	I3_U07	C1, C2, C3	Lec1-15	N1, N2
PEK_U03	I3_U08	C1, C2, C3	Lec1-15	N1, N2
PEK_K01	I3_K05	C2	Lec1, 10-13	N1

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

*** - from table above