

DESCRIPTION OF THE COURSE OF STUDY

Course code	0719-2ID-C14-SP	
Name of the course in	Polish	Środowisko programisty
	English	Programmer's Environment

1. LOCATION OF THE COURSE OF STUDY within the system of studies

1.1. Field of study	Data Engineering
1.2. Mode of study	Full-time
1.3. Level of study	First-cycle engineering studies
1.4. Profile of study*	General academic profile
1.5. Person/s preparing the course description	Martin Rohrmoser
1.6. Contact	martin.rohrmoser@ujk.edu.pl

2. GENERAL CHARACTERISTICS OF THE course of study

2.1. Language of instruction	Polish
2.2. Prerequisites*	Basic computer skills

3. DETAILED CHARACTERISTICS OF THE COURSE OF STUDY

3.1. Form of classes			Laboratory
3.2. Place of classes			Classes in UJK teaching rooms
3.3. Form of assessment			Laboratory - graded credit
3.4. Teaching methods			Analysis and implementation of given examples, discussion, independent problem-solving.
3.5. Bibliography	Required reading	1. B. Kernighan, D. Ritchie, Język ANSI C, WNT, Warszawa 2004 2. T. Oetiker, H. Partl, I. Hyna, E. Schlegl (tłum. J. Gołdasz, R. Kubiak, T. Przechlewski), Nie za krótkie wprowadzenie do systemu LaTeX2e	
	Further reading	1. E. Foster_Johnson, J.C.Welch, M. Anderson, Od podstaw Skrypty powłoki, Helion, Gliwice, 2006 2. S.Prata, Szkoła programowania Język C, Helion, Gliwice, 2006 3. D. E. Knuth, Tex. Przewodnik użytkownika, WNT, Warszawa, 2005	

4. OBJECTIVES, SYLLABUS CONTENT AND INTENDED LEARNING OUTCOMES

4.1 Course objectives (including form of classes)

Laboratory:

C1. To master the operating system environment, primarily through working in the command line (bash).

C2. To introduce systems supporting software development.

C3. To acquire the ability to read and understand programs written in a structured programming language and to create one's own programs.

C4. To create text documents using text processing tools (LaTeX).

3.2 Detailed syllabus (including form of classes)

Laboratory:

Linux shell commands (bash): basic file and directory operations, file attribute operations. Data stream redirection, pipelines. Text file operations, regular expressions (searching, sorting). Bash shell scripts: script arguments, variables, environment variables. Bash shell scripts: arithmetic and logical operations. Bash shell scripts: user interaction, conditional statements, loops, and functions. LaTeX typesetting system: document creation, typesetting mathematical expressions. LaTeX typesetting system: creating presentations – beamer class. Editing a C source file, executing a source file, compilation (gcc). Compilation automation – make utility.

4.3 Intended learning outcomes

Code	A student, who passed the course	Relation to learning outcomes
within the scope of KNOWLEDGE:		
W01	knows basic command-line commands related to working with files and directories.	ID1A_W07
W02	knows the tools used for writing scripts and compiling software.	ID1A_W07
W03	knows the basic data types and structures of the C programming language.	ID1A_W07

W04	knows the tools used for typesetting texts with the LaTeX package.	ID1A_W07
within the scope of ABILITIES :		
U01	navigates freely within the directory and file system of the operating system, is able to use basic operating system software, and can write scripts.	ID1A_U07, ID1A_U08, ID1A_U13
U02	is able to create simple structured programs and prepare mathematical documents in LaTeX.	ID1A_U07, ID1A_U08, ID1A_U13
within the scope of SOCIAL COMPETENCE :		
K01	is aware of the necessity of continuously developing his/her own competencies in the field of information technology methods and technologies.	ID1A_K03 ID1A_K04

4.4. Methods of assessment of the intended learning outcomes

11 Methods of assessment of the intended learning outcomes																				
Teaching outcomes (code)	Method of assessment (+/-)																			
	Exam oral/written*			Test*			Oral answer			Effort in class*			Self-study*			Group work*			Others* e.g. standardized test used in e-learning	
	Form of classes			Form of classes			Form of classes			Form of classes			Form of classes			Form of classes			Lecture, tutorial	
	.	C	..	.	C	..	.	C	..	.	C	..	.	C	..	.	C	..	.	C
W01								+			+									
W02								+			+									
W03								+			+									
W04								+			+									
U01														+						
U02														+						
K01								+			+			+						

*delete as appropriate

4.5. Criteria of assessment of the intended learning outcomes

Form of classes	Grade	Criterion of assessment
laboratory/C (including e-learning)	3	Achievement of <50-60)% of the requirements specified in the assessment methods
	3,5	Achievement of <60-70)% of the requirements specified in the assessment methods
	4	Achievement of <70-80)% of the requirements specified in the assessment methods
	4,5	Achievement of <80-90)% of the requirements specified in the assessment methods
	5	Achievement of <90-100)% of the requirements specified in the assessment methods

5. BALANCE OF ECTS CREDITS - STUDENT'S WORK INPUT

Category	Student's workload	
	Full-time studies	Extramural studies
NUMBER OF HOURS WITH THE DIRECT PARTICIPATION OF THE TEACHER /CONTACT HOURS/	30	
Participation in laboratories*	30	
INDEPENDENT WORK OF THE STUDENT/NON-CONTACT HOURS/	20	
Preparation for the laboratories*	20	
TOTAL NUMBER OF HOURS	50	
ECTS credits for the course of study	2	

*delete as appropriate

Accepted for execution (date and legible signatures of the teachers running the course in the given academic year)

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