POLYTECHNIC OF MEĐIMURJE IN ČAKOVEC

COURSE SYLLABUS

ACADEMIC YEAR: 2022/2023

1. GENERAL COURSE INFORMATION				
1.1 Course name	**Software Engineering and Information Systems**			
1.2 Study program/s	Computing			
1.3 Course status (O,E)	O	**1.6 Mode of instruction (number of hours)**	**Lectures**	30
1.4 Course code	5140		**Exercises**	30
1.5 Course abbreviation	PIIS		**Seminars**	
1.6 Semester	5.		**E-learning**	
1.7 ECTS	5	**1.7 Place and time of instruction**	Polytechnic of Međimurje	

2. TEACHING STAFF			
2.1 Course leader/s-title	PhD. Josip Nađ, lecturer	kontakt	josip.nad@mev.hr
		contact	
2.2 Assistant/s- title		**contact**	
		contact	
2.3 Instruction held by-title	PhD. Josip Nađ, lecturer	**contact**	

3. COURSE DESCRIPTION	
3.1 Course goals	Acquiring basic knowledge of software engineering. Introduction to the role and importance of information systems in business. Getting to know the software development life cycle. Introduction to the main functionalities of business information systems. An overview of trends in software engineering and information systems.
3.2 Prerequisites	Object Oriented Programming 1 Data Base 1
3.3 Course outcomes	After successfully completing the course, students will be able to: O1 - Present methods of user requests collecting and processing O2 - Justify the need for systematic software testing O3 - Analyze the role of information systems in business management O4 - Present the project of information system preparation and implementation
3.4 Course content	The course presents contents related to the basic aspects of software engineering and information systems. Through the project task, students actively go through the life cycle of software, in parallel learning about the problems of industrial information systems.

3.5 Types of coursework										
	X	Lectures	X	Exercises		Blended e-learning	X	Individual activities		Laboratory
		Seminars and workshops	X	Distant learning	X	Field classes		Multimedia and network		Mentorship
		Other								

3.6 Language of instruction	Croatian

3.7 Monitoring students' work (enter the number of ECTS credits for each activity so that the total number of ECTS credits is equal to the total ECTS value of the course, 1 ECTS = 30 hours)

1	Class attendance		Seminars		Essay
1,0	Class activity	1,5	Project		Report/paper
1,5	Midterm exams		Practical task		Continuous knowledge check
	Written exam		Experimental work		
	Oral exam		Research		

3.8 Assessment and evaluation of students' work during classes and at the final exam

Activity specification	Percent %	Points
Assessment during instruction		
Attendance	5%	5
Class activity	5%	5
Seminar/ project/ essay	40%	40
Midterm exam 1	25%	25
Midterm exam 2	25%	25
Exam assessment for the students who failed to fullfil all the obligatory requirements during the semester		
Written exam	*50%*	*50*
Total:	**100%**	**100**

3.9 Assessment criteria –analysis per learning outcomes

Ways of evaluating learning outcomes						
	Attendance	**Activity**	**Mid-term exam 1**	**Mid-term exam 2**	**Practical work**	**Total**
Outcome 1			15		20	35
Outcome 2			10		20	30
Outcome 3				10		10
Outcome 4				15		15
Outcome not-related	5	5				10
Total	5	5	25	25	40	100

Grading of outcomes (in order to pass the mid-term exam/exam the student must achieve at least 50% points for each learning outcome)

Points	Grade
89 – 100	excellent (5)
76 – 88	very good (4)
63 – 75	good (3)
50 – 62	pass (2)
0 – 49	fail (1)

3.10 Specific features related with taking the course

A student cannot take the exam if he / she has not submitted the Project Readiness Report (submitted at least 5 days before the exam deadline).
The final grade is obtained during the exam period and is the sum of points earned during classes.
Students who did not take the midterm exams, access the written part of the exam where all learning outcomes are checked.

3.11 Students obligations

Full-time students are required to attend at least 70% of the total number of hours of lectures and exercises in order to exercise the right to take the exam.
Part-time students are required to attend at least 30% of the total number of hours of lectures and exercises in order to exercise the right to take the exam.
If the student has not fulfilled all the obligations set by the course, he is obliged to attend the lectures again and meet the conditions for taking the exam.
Attendance can be offset by online tuition, organised webinars and added assignments given by teachers. One lesson lasts 45 minutes, and several hours

	form a teaching unit. Absence from one teaching unit is counted as one absence. Delays and apologies are recorded separately. In that case, if the student missed more than 50% of classes, and has a justifiable reason/apology, the request should be submitted to the Department Council, which then decides on the justification of student absences with the obligatory opinion of the course leader.	
3.12 Written assignments	The project readiness report must be written by computer (Times New Roman, font 12). It is delivered electronically. It must contain project requirements and all supporting documentation that will be defined during the course.	
	1.	Gabriele Piccoli, Federico Pigni: Information Systems for Managers 4.0; Prospect Press, 2019.
	2.	Rod Stephens: Beginning Software Engineering; Wrox, 2015.
3.14 Additional reading	1.	Amiya Kumarrath, Hitesh Mohapatra: Fundamentals of Software Engineering, BPB Publications, 2020.
	2.	American Journal of Software Engineering and Applications
4 ADDITIONAL COURSE INFORMATION		
4.1 Quality control	The quality of the program, teaching process, teaching skills and level of mastery of the material will be established by conducting a written evaluation based on questionnaires, and in other standardised ways and in accordance with the by-laws of the Polytechnic of Međimurje in Čakovec.	
4.2 Contact the teacher	Students can contact the teacher during the office hours and during classes, while for short questions and explanations they can contact him/her any day during working hours by coming in person or by landline. It is also possible to ask questions by e-mail, which will be answered in 48 hours at the latest. It is desirable for students to come as often as possible for any possible questions during the teacher's office hours.	
4.3 Information about the course	It is the obligation of each student to be regularly informed about the course. All notifications about the classes or possible postponement of classes will be posted on the bulletin board and on the website of the Polytechnic at least 24 hours in advance.	
4.4 Course contribution to the study program	OS6 - Analyze user needs (explore and detect data sources, currently present business systems, technological constraints, specifics of the business environment) OS13 - Develop applications using an object-oriented paradigm in solving program tasks OS17 - Select the appropriate programming language and technology when solving programming tasks	