POLYTECHNIC OF MEĐIMURJE IN ČAKOVEC

COURSE SYLLABUS

ACADEMIC YEAR: 2022/2023

1. GENERAL COURSE INFORMATION				
1.1 Course name	**Programming tools in programming**			
1.2 Study program/s	Undergraduate professional study in Computer Science			
1.3 Course status (O,E)	Obligatory	**1.6 Mode of instruction (number of hours)**	**Lectures**	30
1.4 Course code			**Exercises**	30
1.5 Course abbreviation	PAUP		**Seminars**	
1.6 Semester	4		**E-learning**	
1.7 ECTS	**6**	**1.7 Place and time of instruction**	The premises of Polytechnic of Medjimurje in Cakovec, according to schedule published on web pages	

2. TEACHING STAFF			
2.1 Course leader/s-title	PhD. Bruno Trstenjak senior lecturer Miran Kovačić, lecturer	**contact**	btrstenjak@mev.hr mkovacic@mev.hr
		contact	
2.2 Assistant/s- title		**contact**	
		contact	
2.3 Instruction held by- title	Miran Kovačić, lecturer	**contact**	

3. COURSE DESCRIPTION	
3.1 Course goals	After completing the course, the student will gain an overview of modern software tools for the development of complex programs. Knowledge is acquired in the field of web application development and the student is trained to independently perform problem tasks in the application of software tools.
3.2 Prerequisites	Passed course: Programming
3.3 Course outcomes	After successfully completing the course, students will be able to: O1 – Explain the properties and how to use the various software tools O2 – Design web applications using basic elements O3 – Properly use tools in the process of validation, responsive design, generating different file types O4 – Independently create a web application according to a given problem task with the use of various software tools
3.4 Course content	The course will contain contents that will give students knowledge about modern software tools and how to use them in order to develop modern applications. Content is processed from the aspect of programming and use of C # programming language.

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

3.6 Language of instruction	Croatian/English

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)

2,0	Class attendance		Seminars		Essay
	Class activity		Project		Report/paper
	Midterm exams	3,0	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
Project	75%	75
Continuous assessment	20%	20
Exam assessment for the students who failed to fullfil all the obligatory requirements during the semester		
Project	*75%*	*75*
Total:	**100%**	**100**

3.9 Assessment criteria – analysis per learning outcomes

Ways of evaluating learning outcomes				
	Attendance	**Continuous assessment**	**Project**	**Total**
Outcome 1		5	10	15
Outcome 2		5	10	15
Outcome 3		5	10	15
Outcome 4		5	45	50
Outcome not-related	5			5
Total	**5**	**20**	**75**	**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

If a student collects 50% of the points of each outcome, he / she directly takes the exam, if he / she has submitted a seminar paper. A student cannot access the exam if he / she has not submitted a seminar paper. Seminar papers are prepared according to the instructions published on the Merlin system and are submitted by posting on the Merlin. The seminar paper should be submitted at least 3 days before the exam deadline.

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		
3.13 Required reading	1.	Dino Esposito: Programming Microsoft ASP.NET MVC 2014
	2.	
3.14 Additional reading	1.	Jon Galloway: Professional ASP.NET MVC 5, Wrox, 2014
	2.	Joel Murach and Mary Delamater : Murach's ASP.NET Core MVC, Mike Murach & Associates,2020
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	- Work in a team, manage professional projects and cooperate with experts from the real sector - Develop programming code in multiple programming languages using modern methods and tools - Choose ways of structuring data in program code, as well as techniques for writing complex program forms and use standard algorithms - Apply database basics through database creation, modelling and administration - Use Cloud computing as a concept to access data and applications	