



POLYTECHNIC OF MEĐIMURJE IN ČAKOVEC

COURSE SYLLABUS

ACADEMIC YEAR: 2022/2023

1. GENERAL COURSE INFORMATION										
1.1 Course name	Multimedia									
1.2 Study program/s	Undergraduate professional study programme in Computer Science									
1.3 Course status (O,E)	elective	1.6 Mode of instruction (number of hours)		Lectures	15					
1.4 Course code				Exercises	45					
1.5 Course abbreviation	MM			Seminars						
1.6 Semester	IV			E-learning						
1.7 ECTS	4	1.7 Place and time of instruction		Premises of the Polytechnic of Međimurje in Čakovec, according to the schedule published on the website of the Polytechnic						
2. TEACHING STAFF										
2.1 Course leader/s-title	PhD, Sanja Brekalo, High School Professor	contact		sbrekalo@mev.hr						
		contact								
2.2 Assistant/s- title		contact								
		contact								
2.3 Instruction held by- title	PhD, Sanja Brekalo, High School Professor	contact								
3. COURSE DESCRIPTION										
3.1 Course goals	After completing the course, the student will be able to recognize various aspects of multimedia in computer systems. Knowledge in the field of multimedia is acquired and the student is trained to perform multimedia tasks independently.									
3.2 Prerequisites										
3.3 Course outcomes	<p>After successfully completing the course, students will be able to:</p> <ul style="list-style-type: none"> I1 - Judge the digitization and compression of multimedia data in different media, depending on the file size and end use of each media I2 - Select the optimal colour system for each medium given the differences between individual systems I3 - Choose between vector, raster and 3D graphics depending on the medium in which they are used I4 - Create a 3D model by selecting 3D modelling techniques I5 - Create a multimedia presentation, 3D model and its animation 									
3.4 Course content	The course presents contents related to multimedia and various media and their specifics from the aspect of digital multimedia. The contents are processed by comparing different types of digital media, their digitization and compression, and the advantages and disadvantages of individual media and multimedia architectures are stated. The teaching units present contents related to digitalization, compression, vector, raster and 3D graphics, video and sound. 3D models are practically created and animated with the addition of other media.									
3.5 Types of coursework	x	Lectures	x	Exercises		Blended e-learning	x	Individual activities		Laboratory

		Seminars and workshops	x	Distant learning		Field classes	x	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	Class attendance		Seminars		Essay																																																																			
		Class activity		Project		Report/paper																																																																			
	1	Midterm exams	1	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	<table border="1"> <thead> <tr> <th>Activity specification</th> <th>Percent %</th> <th>Points</th> </tr> </thead> <tbody> <tr> <td colspan="3" style="text-align: center;">Assessment during instruction</td> </tr> <tr> <td>Attendance</td> <td>5%</td> <td>5</td> </tr> <tr> <td>Class activity</td> <td>5%</td> <td>5</td> </tr> <tr> <td>Seminar/ project/ essay</td> <td>30%</td> <td>30</td> </tr> <tr> <td>Midterm exam 1</td> <td>30%</td> <td>30</td> </tr> <tr> <td>Midterm exam 2</td> <td>30%</td> <td>30</td> </tr> <tr> <td colspan="3" style="text-align: center;"><i>Exam assessment for the students who failed to fulfil all the obligatory requirements during the semester</i></td> </tr> <tr> <td>Written exam</td> <td>60%</td> <td>60</td> </tr> <tr> <td>Total:</td> <td>100%</td> <td>100</td> </tr> </tbody> </table>										Activity specification	Percent %	Points	Assessment during instruction			Attendance	5%	5	Class activity	5%	5	Seminar/ project/ essay	30%	30	Midterm exam 1	30%	30	Midterm exam 2	30%	30	<i>Exam assessment for the students who failed to fulfil all the obligatory requirements during the semester</i>			Written exam	60%	60	Total:	100%	100																																	
Activity specification	Percent %	Points																																																																							
Assessment during instruction																																																																									
Attendance	5%	5																																																																							
Class activity	5%	5																																																																							
Seminar/ project/ essay	30%	30																																																																							
Midterm exam 1	30%	30																																																																							
Midterm exam 2	30%	30																																																																							
<i>Exam assessment for the students who failed to fulfil all the obligatory requirements during the semester</i>																																																																									
Written exam	60%	60																																																																							
Total:	100%	100																																																																							
3.9 Assessment criteria – analysis per learning outcomes	<table border="1"> <thead> <tr> <th colspan="7">Ways of evaluating learning outcomes</th> </tr> <tr> <th></th> <th>Attendance</th> <th>Activity</th> <th>Mid-term exam 1</th> <th>Mid-term exam 2</th> <th>Practical work</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Outcome 1</td> <td></td> <td></td> <td>5</td> <td>5</td> <td></td> <td>10</td> </tr> <tr> <td>Outcome 2</td> <td></td> <td></td> <td>5</td> <td></td> <td></td> <td>5</td> </tr> <tr> <td>Outcome 3</td> <td></td> <td></td> <td></td> <td>5</td> <td></td> <td>5</td> </tr> <tr> <td>Outcome 4</td> <td></td> <td></td> <td>20</td> <td>20</td> <td></td> <td>40</td> </tr> <tr> <td>Outcome 5</td> <td></td> <td></td> <td></td> <td></td> <td>30</td> <td>30</td> </tr> <tr> <td>Outcome not-related</td> <td>5</td> <td>5</td> <td></td> <td></td> <td></td> <td>10</td> </tr> <tr> <td>Total</td> <td>5</td> <td>5</td> <td>30</td> <td>30</td> <td>30</td> <td></td> </tr> </tbody> </table> <p>Grading of outcomes (in order to pass the mid-term exam/exam the student must achieve at least 50% points for each learning outcome)</p> <p>Points Grade</p> <p>89 – 100 excellent (5)</p> <p>76 – 88 very good (4)</p> <p>63 – 75 good (3)</p> <p>50 – 62 pass (2)</p> <p>0 – 49 fail (1)</p>										Ways of evaluating learning outcomes								Attendance	Activity	Mid-term exam 1	Mid-term exam 2	Practical work	Total	Outcome 1			5	5		10	Outcome 2			5			5	Outcome 3				5		5	Outcome 4			20	20		40	Outcome 5					30	30	Outcome not-related	5	5				10	Total	5	5	30	30	30	
Ways of evaluating learning outcomes																																																																									
	Attendance	Activity	Mid-term exam 1	Mid-term exam 2	Practical work	Total																																																																			
Outcome 1			5	5		10																																																																			
Outcome 2			5			5																																																																			
Outcome 3				5		5																																																																			
Outcome 4			20	20		40																																																																			
Outcome 5					30	30																																																																			
Outcome not-related	5	5				10																																																																			
Total	5	5	30	30	30																																																																				
3.10 Specific features related with taking the course	<p>If a student collects 50% of the points of each outcome, he / she directly take the exam, provided that he / she have submitted a practical task. A student cannot take the exam if he / she have not submitted a practical task. The practical task is made according to the instructions published on the Merlin system and is submitted by placing it on the Merlin. The practical task is submitted at least 3 days before the exam. During the exam, it is possible to verbally check the knowledge in the preparation of practical task.</p> <p>If a student does not achieve a sufficient number of points on the midterm</p>																																																																								

	<p>exam, he / she cannot take the next midterm exam.</p> <p>Once achieved points in intermediate exams for each learning outcome are no longer deleted unless the student decides to correct the result for each learning outcome, whereby the points won until then are deleted and newly achieved points for that learning outcome are entered.</p>	
3.11 Students obligations	<p>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.</p> <p>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.</p>	
3.12 Written assignments		
3.13 Required reading	1.	Tay Vaughan, Multimedia: Making It Work, Ninth Edition 9th Edition, Mc Graw Hill Education, 2014
	2.	
3.14 Additional reading	1.	Nigel Chapman, Jenny Chapman, Digital Multimedia, Wiley, 2009.
	2.	
4 ADDITIONAL COURSE INFORMATION		
4.1 Quality control	<p>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.</p>	
4.2 Contact the teacher	<p>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.</p>	
4.3 Information about the course	<p>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.</p>	

4.4 Course contribution to the study program	IS4 Apply communication and professional ethics IS5 Identify trends in ICT technologies in the domestic and international market IS6 Analyse user needs (investigate and detect data sources, currently present business systems, technological constraints, specifics of the business environment) IS16 Develop web and mobile projects, applying advanced technologies and connecting to databases using modern methods and tools
---	--