



POLYTECHNIC OF MEĐIMURJE IN ČAKOVEC

COURSE SYLLABUS

ACADEMIC YEAR:	2020/2021
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1. GENERAL COURSE INFORMATION

1.1 Course name	Organization of environmental protection activities			
1.2 Study program/s	Undergraduate professional study Sustainable Development			
1.3 Course status (O,E)	O	1.6 Mode of instruction (number of hours)	Lectures	30
1.4 Course code	4093		Exercises	30
1.5 Course abbreviation	OOPZO		Seminars	-
1.6 Semester	4.		E-learning	Merlin
1.7 ECTS	5	1.7 Place and time of instruction	The premises of the Polytechnic of Međimurje in Čakovec, according to the schedule published on the website	

2. TEACHING STAFF

2.1 Course leader/s-title	Goran Sabol, pred.	contact	goran.sabol@mev.hr
		contact	
2.2 Assistant/s- title		contact	
		contact	
2.3 Instruction held by- title		contact	

3. COURSE DESCRIPTION

[illegible]

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	1	Seminars		Essay																																																																						
	1	Class activity		Project	1	Report/paper																																																																						
		Midterm exams	1	Practical task		Continuous knowledge check																																																																						
	0,5	Written exam		Experimental work																																																																								
	0,5	Oral exam		Research																																																																								
3.8 Assessment and evaluation of students' work during classes and at the final exam	<table><tr><th>Activity specification</th><th>Percent %</th><th>Points</th></tr><tr><td colspan="3">Assessment during instruction</td></tr><tr><td>Attendance</td><td>2,5%</td><td>2,5</td></tr><tr><td>Class activity</td><td>2,5%</td><td>2,5</td></tr><tr><td>Seminar/ project/ essay</td><td>10%</td><td>10</td></tr><tr><td>Midterm exam 1</td><td>42%</td><td>42</td></tr><tr><td>Midterm exam 2</td><td>43%</td><td>43</td></tr><tr><td colspan="3">Exam assessment for the students who failed to fulfil all the obligatory requirements during the semester</td></tr><tr><td>Written exam</td><td>60%</td><td>60</td></tr><tr><td>Oral exam</td><td>40%</td><td>40</td></tr><tr><td>Total:</td><td>100%</td><td>100</td></tr></table>						Activity specification	Percent %	Points	Assessment during instruction			Attendance	2,5%	2,5	Class activity	2,5%	2,5	Seminar/ project/ essay	10%	10	Midterm exam 1	42%	42	Midterm exam 2	43%	43	Exam assessment for the students who failed to fulfil all the obligatory requirements during the semester			Written exam	60%	60	Oral exam	40%	40	Total:	100%	100																																					
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3.9 Assessment criteria – analysis per learning outcomes	<table><tr><th colspan="6">Ways of evaluating learning outcomes</th><th></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><tr><td>Outcome 1</td><td></td><td></td><td>10</td><td></td><td></td><td>10</td></tr><tr><td>Outcome 2</td><td></td><td></td><td>10</td><td>15</td><td></td><td>25</td></tr><tr><td>Outcome 3</td><td></td><td></td><td>22</td><td></td><td></td><td>22</td></tr><tr><td>Outcome 4</td><td></td><td></td><td></td><td>23</td><td></td><td>23</td></tr><tr><td>Outcome 5</td><td></td><td></td><td></td><td>5</td><td></td><td>5</td></tr><tr><td>Outcome 6</td><td></td><td></td><td>2,5</td><td>5</td><td></td><td>7,5</td></tr><tr><td>Outcome not-related</td><td>2,5</td><td></td><td>2,5</td><td>2,5</td><td></td><td>7,5</td></tr><tr><td>Total</td><td>2,5</td><td></td><td>47</td><td>50,5</td><td></td><td>100</td></tr></table>						Ways of evaluating learning outcomes								Attendance	Activity	Mid-term exam 1	Mid-term exam 2	Practical work	Total	Outcome 1			10			10	Outcome 2			10	15		25	Outcome 3			22			22	Outcome 4				23		23	Outcome 5				5		5	Outcome 6			2,5	5		7,5	Outcome not-related	2,5		2,5	2,5		7,5	Total	2,5		47	50,5		100
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	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 the student collects 50% of the points of each outcome directly access orally exam. If a student does not achieve a sufficient number of points on the midterm exam, he cannot take the next midterm exam. Once won 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. A student cannot access the exam period if he / she has not submitted and presented seminar paper. The final grade is obtained on the oral part of the exam.																																																																											

	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.	
3.11 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 consultations, organized 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 the event that a student is absent from more than 50% of classes, and has a justifiable reason / apology, a 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	Seminar papers must be computer written and may have a maximum of 12 text cards (Times New Roman, font 12) from introduction to conclusion, together with pictures, table appendices, etc. Seminar papers must have an adequate title page, content, marked pages and literature. The seminar paper should be divided into chapters and contain a list of references and a list of figures and tables and graphs and finally a summary / conclusion in the size of 250 words. The student guarantees the authenticity of the work with his signature.	
3.13 Required reading	1.	Zakon o zaštiti okoliša NN (80/13, 153/13, 78/15, 12/18, 118/18)
	2.	Priručnik za izračun emisija u zrak za nacionalne E-PRTR obveznike – HAOP 2017. (online izdanje)
3.14 Additional reading	1.	HR linkovi – www.sabor.hr , www.mzoip.hr , www.haop.hr , www.fzoeu.hr
	2.	EU linkovi; www.eea.europa.eu i http://eippcb.jrc.ec.europa.eu/reference/
	3.	Priručnik Registra onečišćavanja okoliša - AZO, Zagreb 2008.
	4.	Ispuštanja u zrak (Dodatak A Priručnika ROO) - AZO, Zagreb 2008.
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	

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	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	I1 - Interpret information, ideas, problems and solutions to professional and general audiences I3 - Use new technologies and techniques as part of the lifelong learning process I4 - Advocate an ethical approach to work and to associates in project teams I6 - Solve engineering problems of sustainable development using mathematics, physics, chemistry and biology I7 - Analyze the collected data in the field of sustainable development I8 - Interdisciplinary to solve engineering problems of sustainable development I10 - Interpret European Union legislation in the field of sustainable development I23 - Manage water, air, soil, waste and energy in a sustainable way I25 - Identify significant environmental aspects within the organization for the purpose of management and compliance with standards and obligations I27 - Assess potential risks to the environment and cooperate in the preparation of environmental studies and studies on the impact of the project on the environment

5. ANALYSIS OF COURSE TOPICS (the number of hours is equal to the number of lectures and exercises of the course)

LECTURES				
Hours	Topic and description	Method	Learning outcomes	Course outcome
1.	Legislative framework and basic terminology in the field of environmental protection	Presentation, PP presentation	Use professional terminology from environmental protection in speech in a letter	I1, I2
2.	Environmental protection entities	Presentation, PP presentation	Identify and distinguish between environmental actors and their role	I2
3.	Environmental Pollution Register (ROO)	Presentation, PP presentation	Use the ROO database	I3
4.	Preparation of documentation for the assessment of the need to assess the impact of the project on the environment	Presentation, PP presentation	Use of documentation	I3
5.	Elaborations and remediation studies of environmental protection	Presentation, PP presentation	Use the study of environmental protection	I3
6.	Environmental protection programs	Presentation, PP presentation	Explain the environmental program	I4

7.	Development plans, protection programs and protection of protected areas	Presentation, PP presentation	Use plans and programs	I4
8.	Development of plans and programs for environmental components	Presentation, PP presentation	Use plans and programs	I3
9.	BAT and BREF	Presentation, PP presentation	Understand BAT and BREF	I6
10.	Preparation of a report for the Croatian Environment and Nature Agency and preparation of a report on the state of the environment	Presentation, PP presentation	Understand the Waste Management Plan	I3, I4, I5
11.	Waste management plan of the Republic of Croatia and development of waste management plans at the company level	Presentation, PP presentation	Collect documentation	I3, I4
12.	Documentation for waste management (ONTO forms, accompanying sheets, waste management plan of waste producers)	Presentation, PP presentation	Collect documentation	I3, I4, I5
13.	Establishing an environmental management system	Presentation, PP presentation	Understand the environmental management system	I5, I6
14.	ISO standards related to environmental protection	Presentation, PP presentation	Understand the importance of ISO standards	I3
15.	Inspection control	Presentation, PP presentation	Understand the importance of supervision	I1, I2, I5
EXERCISES/ SEMINARS				
Hours	Topic and description	Method	Learning outcomes	Course outcome
1. 2.	Adoption of basic terminology	Adoption of terminology	Use professional terminology	I1, I2
3. 4.	Analysis of environmental entities	View and work with the database	Analyze and identify environmental entities	I2
5. 6.	ROO database overview	Group task creation	Use the ROO database	I3
7. 8.	Independent preparation of documentation	Example analysis, discussion	Handle documentation	I3
9. 10.	Example of environmental study	Example analysis, discussion	Apply the study	I3
11. 12.	Examples and analysis of environmental programs	Example analysis, discussion	Interpret the example	I4
13. 14.	Examples and analysis of environmental plans	Example analysis, discussion	Interpret the example	I4

15. 16.	Development of plans and programs	Independent task	Interpret plan and program	I3
17. 18.	Example analysis BAT, BREF	Example analysis, discussion	Interpret the example	I6
19. 20.	Making a report	Independent task	Collect data to generate reports	I3, I4, I5
21. 22.	Princip of making a plan	Independent task	Collect data to make a plan	I3, I4
23. 24.	Completion of waste management documentation	Independent task	Use documentation	I3, I4, I5
25. 26.	Examples from practice	Example analysis, discussion	Interpret the example	I5, I6
27. 28.	Application of norms	Example analysis, discussion	Interpret the example	I3
29. 30.	Obligations during inspection	Analysis of obligations and supervision procedure	Understand the importance of supervision	I1, I2, I5