

SYLLABUS ¹

THIS COURSE UNIT IS TAUGHT IN ROMANIAN LANGUAGE

1. Information about the program

1.1 Higher education institution	Politehnica University of Timisoara
1.2 Faculty ² / Department ³	Faculty of Management in Production and Transports / Management Department
1.3 Chair	—
1.4 Field of study (name/code ⁴)	Engineering and Management /20.70.10
1.5 Study cycle	Master
1.6 Study program (name/code/qualification)	Engineering and management of logistics systems

2. Information about discipline

2.1 Name of discipline/The educational classe ⁵	Eco-efficiency of logistics systems / field discipline						
2.2 Coordinator (holder) of course activities	Associate Professor, PhD. Eugenia GRECU						
2.3 Coordinator (holder) of applied activities ⁶	Associate Professor, PhD. Eugenia GRECU						
2.4 Year of study ⁷	1	2.5 Semester	2	2.6 Type of evaluation	E	2.7 Type of discipline ⁸	DCAV

3. Total estimated time (direct activities (fully assisted), partially assisted activities and unassisted activities⁹)

3.1 Number of hours fully assisted/week	3 ,of which:	3.2 course	2	3.3 seminar/laboratory/project			1
3.1* Total number of hours fully assisted/sem.	42 ,of which:	3.2* course	28	3.3* seminar/laboratory/project			14
3.4 Number of hours partially assisted/week	,of which:	3.5 project, research		3.6 training		3.7 hours designing M.A. dizertation	
3.4* Number of hours pasrtially assisted/ semester	,of which:	3.5* project of research		3.6* training		3.7* hours designing M.A. dizertation	
3.8 Number of hours of unassisted activities/ week	3 ,of which:	Additional documentation in the library, on specialized electronic platforms, and on the field					1
		Study using a manual, course materials, bibliography and lecture notes					1
		Preparation of seminars/ laboratories, homework, assignments, portfolios, and essays					1
3.8* Total number of hours of unasssited asctivities/ semester	42 ,of which:	Additional documentation in the library, on specialized electronic platforms, and on the field					14
		Study using a manual, course materials, bibliography and lecture notes					14
		Preparation of seminars/ laboratories, homework, assignments, portfolios, and essays					14
3.9 Total hrs./week ¹⁰	6						
3.9* Total hrs./semester	84						
3.10 No. of credits	5						

4. Prerequisites (where applicable)

4.1 Curriculum	•
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¹ The form corresponds to the Syllabus promoted by OMECTS 5703/18.12.2011 (Annex 3), updated based on the Specific Standards ARACIS of December 2016.

² The name of the faculty which manages the educational curriculum to which the discipline belongs

³ The name of the department entrusted with the discipline, and to which the course coordinator/holder belongs.

⁴ Fill in the code provided in HG no. 376/18.05.2016 or in HG similars annually updated.

⁵ The educational classes of disciplines (ARACIS – specific standards, art./paragraph 4.1.2.a) are: fundamental disciplines, field disciplines, majoring/specialization disciplines.

⁶ The applied activities refer to: seminar (S) / laboratory (L) / project (P) / practice/training (Pr).

⁷ The year of study to which the discipline is provided in the curriculum .

⁸ The types of disciplines (ARACIS – specific standards, art./paragraph 4.1.2.a) are: extended knowledge discipline / advanced knowledge discipline and synthetic discipline (DA / DCAV and DS) or art./paragraph 4.1.2 b) complementary discipline (DC)).

⁹ Within UPT, the number of hours from 3.1*, 3.2*,...,3.9* are obtained by multiplying by 14 (weeks) the number of hours from 3.1, 3.2,..., 3.9.

¹⁰ The total number of hours/week is obtained by summing up the number of hours from 3.1, 3.4 și 3.8.

4.2 Competencies	•
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5. Conditions (where applicable)

5.1 of the course	• Classroom, laptop, projector, blackboard, internet connection;
5.2 to conduct practical activities	• Seminar room with projector, laptop, blackboard, internet connection;

6. Specific competencies acquired through this discipline

Specific competencies	<ul style="list-style-type: none"> • Ability to select, combine and use appropriately knowledge, skills, values and attitudes, in order to successfully solve specific work or learning situations of the study program. • Ability for professional and personal development in conditions of effectiveness and efficiency, in terms of responsibility and autonomy of action of the student
Professional competencies ascribed to the specific competencies	•
Transversal competencies ascribed to the specific competencies	•

7. Objectives of the discipline (based on the grid of specific competencies acquired)

7.1 The general objective of the discipline	<ul style="list-style-type: none"> • Students acquire basic knowledge on the impact of logistics systems on the ecosystem, the consequences, effects and ways of evaluating them. • The aim is to get acquainted with the specific methodology of procedures and methods regarding the eco-efficiency of logistics systems.
7.2 Specific objectives	<ul style="list-style-type: none"> • Students learn the principles of combating pollution • Optimization from the point of view of eco-efficiency in the case of different types of logistics systems

8. Content

8.1 Course	Number of hours	Teaching methods
1. The concept of sustainable development	2	lecture, conversation, explanation, example, comparative analysis, simulation, case study, problematization, brainstorming, method projects
2. Transboundary pollution and global pollution	2	
3. The economic principles of transboundary pollution	2	
4. The effects of economic activity on the environment.	4	
5. Direct regulations - economic instruments for environmental protection	2	
6. Environmental quality standards; Waste emission standards (in air, water, soil); Product rules and procedures	4	
7. Issuance certificates	2	
8. Consignment and liability systems	2	
9. Subsidies and financial aid to encourage pollution reduction	2	
10. Characteristics of environmental taxes; Pigouvian taxes and financial taxes	2	
11. Forms of environmental taxes and royalties	2	
12. Discharge royalties; Noise charges; Royalties per product	2	

Bibliography ¹¹ 1. Grecu Eugenia, "Imperatives of eco-efficiency", SOLNESS Publishing House, Timisoara, 978-973-729-443-2, 2015		
2. Grecu, Eugenia; Aceleanu, Mirela Ionela; Albulescu, Claudiu Tiberiu- "The economic, social and environmental impact of shale gas exploitation in Romania: A cost-benefit analysis", RENEWABLE & SUSTAINABLE ENERGY REVIEWS, Volume: 93, Pages: 691-700, IF 9.184, Q1, 2018		
3. Grecu Eugenia, "NEW TECHNOLOGIES - BETWEEN BUSINESS AND ENVIRONMENTAL PROTECTION IN ROMANIA", Environmental Engineering and Management Journal, 2014, vol8, pp. 1873-1879, IF 1,008, Q3, 2014		
4. Grecu Eugenia, Petrilean DC, Ionel Ioana, "CARBON FOOTPRINT IMPORTANCE FOR AN INTEGRATED WASTE MANAGEMENT SYSTEM", Journal of Environmental Protection and Ecology, Vol. 17, Book 2,17, No 2, 593–602, IF0,734, Q4,2016		
5. Oncioiu, I; Petrescu, AG; Grecu, E; Petrescu, M - "Optimizing the Renewable Energy Potential: Myth or Future Trend in Romania", "Energies" Volume 10, Issue 6 (/ 1996-1073 / 10/6), IF 2.262, Q2, 2017		
8.2 Applied activities¹²	Number of hours	Teaching methods
1. Transboundary pollution and global pollution; Economic principles of transboundary pollution, case study	2	explanation, example benchmarking, simulation, case study, problem solving, brainstorming, project method.
2. The effects of economic activity on the environment; .Direct regulations - economic instruments for environmental protection; Case studies	2	
3. Environmental quality norms; Waste emission standards (in air, water, soil); Product rules and procedures; Case studies	2	
4. Issuance certificates; Consignment and liability systems	2	
5. Environmental taxes and royalties; case studies	2	Discussions, explanations, examples, case studies. Presentation and debates on the reports on given topics.
6. Case studies on the efficiency of limiting the pollution level of different logistics systems	4	Discussions, explanations, examples, case studies. Presentation and debates on the reports on given topics.
Bibliography ¹³ 1. Grecu Eugenia, "Imperatives of eco-efficiency", SOLNESS Publishing House, Timisoara, 978-973-729-443-2, 2015		
2. Borzel, T.A.- "European environmental policies between success and failure", European Institute, Iasi, 2007		
3. S. MASU, E. GRECU, M. POPA, I. ONCIOIU - "Aspects in situ Oil Polluted Soil Phytoremediation with Pasture Plants", "Journal of Environmental Protection and Ecology" 18, No 4, 1398–1402 (2017) , IF 0.774, Q4, 2017		
4. Oncioiu, I .; Grecu, Eugenia; Masu, Smaranda; et al - "The effect of fly ash on sunflower growth and human health", "ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH" Volume: 25 Issue: 35, Pages: 35548-35554, IF 2.8, Q2, 2018		

9. Corroboration of the content of the discipline with the expectations of the main representatives of the epistemic community, professional associations and employers in the field afferent to the program

¹¹ At least one title must belong to the department staff teaching the discipline, and at least one title must refer to a relevant work for the discipline, a national and international work that can be found in the UPT Library.

¹² The types of applied activities are those mentioned in 5. If the discipline contains more types of applied activities then they are marked, consecutively, in the table below. The type of activity will be marked distinctively under the form: „Seminar:“, „Laboratory:“, „Project:“ and/or „Practice/Training:“.

¹³ At least one title must belong to the staff teaching the discipline.

- We organized debates with representatives of companies, but also with other teachers in the field, tenured in other higher education institutions, to identify the needs and expectations of employers in the field, as well as coordination with other similar programs in other educational institutions. higher. Depending on the results of these debates, as well as through a feedback mechanism taking into account the reactions of employers in the field, we have permanently improved the structure of courses and seminars in this discipline. We have actively collaborated with the social environment, both in terms of educational and research offer, and by participating in the development of local, regional or national development policies.

10. Evaluation

Type of activity	10.1 Evaluation criteria ¹⁴	10.2 Evaluation methods	10.3 Share of the final grade
10.4 Course	- completeness and correctness of knowledge; logical coherence, fluency, expressiveness, force of argument; the ability to operate with the assimilated knowledge in complex intellectual activities; the ability to apply in practice, in different contexts, the knowledge learned; ability to analyze, personal interpretation, originality, creativity	Written assessment which ensures the uniformity of the subjects (in terms of scope and difficulty in particular) for the students subject to assessment, as well as the possibility to examine a larger number of students in the same unit of time; The written exam involves 3 theoretical subjects and one with an applicative character; Summative evaluation	50%
10.5 Applied activities	S:	project evaluation - active presence at seminars (answers, questions, completions, debates, etc.); - reports on the given topics	50%
	L: the ability to apply in practice, in different contexts, the knowledge learned; ability to analyze, personal interpretation, originality, creativity	project evaluation - active presence at laboratories (answers, questions, completions, debates, etc.); - reports on the given topics - project presentation	50%
	P:		
	Pr:		
	Tc-R¹⁵:		
10.6 Minimum performance standard (minimum amount of knowledge necessary to pass the discipline and the way in which this knowledge is verified ¹⁶)			
<ul style="list-style-type: none"> • Minimum requirements for promotion: Obtaining 50% of the total score. 			

Date of completion

9.12.2020

Course coordinator
(signature)

Coordinator of applied activities
(signature)

Head of Department
(signature)

Date of approval in the Faculty
Council ¹⁷

Dean
(signature)

09.2018

¹⁴ The Syllabus must contain the evaluation method of the discipline, specifying the criteria, the methods and the forms of evaluation, as well as mentioning the share attached to these within the final mark. The evaluation criteria must correspond to all activities stipulated in the curriculum (course, seminar, laboratory, project), as well as to the methods of continuous assessment (homework, essays etc.)

¹⁵ Tc-R= Homework-Reports

¹⁶ For this point turn to "Ghid de completare a Fișei disciplinei" found at: http://univagora.ro/m/filer_public/2012/10/21/ghid_de_completare_fisa_disciplinei.pdf

¹⁷ The approval is preceded by discussing the study program's board's point of view with regards to the syllabus.