

Annex 6

SUBJECT OUTLINE

1. Information on the study programme

1.1 Academic institution	UNIVERSITY OF ORADEA
1.2 Faculty	FACULTY OF ENVIRONMENTAL PROTECTION
1.3 Department	ENVIRONMENTAL ENGINEERING
1.4 Field of study	ENVIRONMENTAL ENGINEERING
1.5 Cycle of study	UNDERGRADUATE STUDIES
1.6 Study programme/Qualification	BIOTECHNICAL AND ECOLOGICAL SYSTEMS ENGINEERING

2. Information on the discipline

2.1 Name of discipline	COMPLEX PLANNING OF THE ENVIRONMENT						
2.2 Course holder	Lecturer PhD eng. AGUD ELIZA						
2.3 Seminar/Laboratory/Project holder	Lecturer PhD eng. AGUD ELIZA						
2.4 Year of study	IV	2.5 Semester	VII	2.6 Type of evaluation	Summative	2.7 Regime of discipline	I

(C) Compulsory; (O) Optional; (E) Elective

3. Total estimate time (hours per semester of didactic activities)

3.1 Number of hours per week	2	out of which: 3.2 course	1	out of which 3.3 seminar/laboratory/project	1	
3.4 Total hours in the curriculum	28	out of which: 3.5 course	14	out of which 3.6 seminar/laboratory/project	14	
Time allotment						
Study assisted by manual, course support, bibliography and notes						15
Additional documentation in the library/ on specialised electronic platforms and in the field						10
Preparation of seminars/laboratories/ topics/reports, portfolios and essays						10
Tutorship						15
Examinations						10
Other activities.....						12
3.7 Total hours of individual study	72					
3.9 Total hours per semester	100					
3.10 Number of credits	4					

4. Pre-requisites (where appropriate)

4.1 curriculum	(stipulations)
4.2 competences	

5. Conditions (where appropriate)

5.1. related to course	Video projector, computer
5.2. related to seminar/laboratory/ project	Endowments related to the development of seminar classes (computer, etc.), the performance of all seminar works and field trips.

6. Specific competences acquired	
Professional competences	<ul style="list-style-type: none"> - C1. Explaining the mechanisms, processes and effects of anthropogenic or natural origin that determine and influence environmental pollution; -C1.1 Defining the fundamental concepts necessary for the application of environmental scientific theories and methodology -C1.4 Qualitative and quantitative analysis of natural phenomena and technological processes to prevent and reduce the impact on the environment.
Transversal competences	<ul style="list-style-type: none"> - CT3. Efficient use of information sources and of assisted communication and professional training resources (portals, Internet, specialized software applications, databases, online courses, etc.) both in Romanian and in an international language.

7.Objectives of discipline (coming from the specific competencesacquired)

7.1 General objective	The objective of the discipline is to provide students with knowledge regarding the arrangement of the environment and the models used in the practice of arranging the various components of the environment.
7.2 Specific objectives	<ul style="list-style-type: none"> - Formation of a positive and responsible behavior both towards the economic importance and for the environment. - Knowledge and application of norms and regulations in environmental planning. - Formation of skills for application and transfer of conceptual-technical skills in carrying out planning projects.

8. Contents*/

8.1 Course	Methods of teaching	No. of hours/Remarks
SEMESTER I. 1. Organizing and arranging the environment. Introductory notions	Lecture, debate	Attendance at the course is optional, but recommended

2. General principles of environmental planning. General geographical principles.	Lecture, debate	Attendance at the course is optional, but recommended
3. Organization of territorial environmental systems. The system of territorial organization. Development plans and urban documentation	Lecture, debate	Attendance at the course is optional, but recommended
4. Techniques used in arranging the components of the environment. 4.1. Fighting landslides through specific planning works. General notions about landslides. Classification of landslides. Factors that cause landslides. Landslide prevention and control works 4.2. Arrangements along watercourses. 4.3. Arrangement of waste storage facilities. Quarries and platforms for waste storage.	Lecture, debate	Attendance at the course is optional, but recommended
5. Forest management of the territory. Generalities. National Forest Fund. Management and organization of the forest ecosystem	Lecture, debate	Attendance at the course is optional, but recommended
6. Arrangement, design, monitoring of protected areas and conservation of wetlands. The architecture of protected areas and the ecology of the landscape. The size of the protected areas. Management of protected areas. Development, protection and conservation of the Danube Delta Biosphere. Ecological reconstruction of the Danube Delta. Arrangement and correction of wetlands in the north of the country	Lecture, debate	Attendance at the course is optional, but recommended
7. Landscaping. Theoretical elements regarding green spaces. Typology of green spaces. Functions of urban green spaces. The main types of urban green spaces.	Lecture, debate	Attendance at the course is optional, but recommended
8. Tourist arrangement of environmental components. Principles of tourist planning. Coastal development. Arrangement of spas. Landscaping. Models of mountain tourism. Development of rural areas. Urban planning.	Lecture, debate	Attendance at the course is optional, but recommended
Bibliography 1. Agud E., 2010, Amenajarea complexă a mediului, 2. Benedek, J., 2004, Amenajarea teritoriului și dezvoltarea regională, Edit. Presa Univ. Clujeană, Cluj-Napoca. 3. Călinoiu M., Mitran Ramona Violeta, 2011, Amenajarea complexă a mediului, Editura Acedemica Brâncuși, Tg-Jiu. 4. Mohan, G., Ardelean, A., 1993, Ecologie și protecția mediului, Edit. Scaiul, București. 5. Odum, E., 1991, Fundamentals of Ecology, W.B. Saunders Comp., Londra. 6. Peus, F., 1998, Auflosung der Begriffe Biotop und Biozone, Deutsche Entomologie, 1-5. 7. Rucăreanu, H., Bleahu, I., 1981, Amenajarea pădurilor, Edit. Ceres, București. 8. Surd, V., 2002, Introducere în geografia spațiului rural, Edit. Presa Universitară Clujeană, Cluj-Napoca. 9. Surd, V., Bold, I., Zotic, V., Chira, Carmen, 2005, Amenajarea teritoriului și infrastructuri tehnice, Edit. Presa Univ. Clujeană, Cluj-Napoca. 10. Stugren, B., 1995, Ecologie generală, Edit. Did. și Pedag., București. 11. Zăpârțan, M., Laslo V. și Agud Eliza, 2014, Ariile protejate forma de conservare a biodiversității plantelor, Editura Scoala Ardeleana Eikon,		

Cluj-Napoca.		
8.2 Seminar	Methods of teaching	No. of hours/ Remarks
		2
1. Models of organizing the environment with the help of COREMAS	Student contribution, debate	4
2. Case studies: Retezat National Park and Rodna National Park	Student contribution, debate	2
3. Case study: Danube Delta	Student contribution, debate	2
4. Case study regarding the arrangement of green spaces in school units.	Student contribution, debate	2
5. Development regions in Romania	Student contribution, debate	2
6. European and Romanian legislation on environmental planning	Student contribution, debate	2
Bibliography 1. Agud E., 2010, Amenajarea complexa a mediului , lucrari practice, 2. Benedek, J., 2004, Amenajarea teritoriului și dezvoltarea regională, Edit. Presa Univ. Clujeană, Cluj-Napoca. 3. Călinoiu M., Mitran Ramona Violeta, 2011, Amenajarea complexă a mediului, Editura Acedemica Brâncuși, Tg-Jiu. 4. Ianoș, I. (1990), Elemente metodologice privind analiza organizării spațiului geografic, Lucr. Sem. Geogr. „D. Cantemir” Univ. „Al. I. Cuza”, Iași; 5. Iordan, I., Alexandrescu, Valeria (1996), Considerații geografice privind reorganizarea administrativ-teritorială a teritoriului României, Revista Geografică, II-III, București; 6. Mîndruț, O., 1976, Principii fizico-geografice de organizare a spațiului, Bul. Soc. Științ. Geogr., Serie nouă, vol. IV. 7. Raularian Rusu, Organizarea spațiului geografic și amenajarea teritoriului Caiet de lucrări practice, 8. Surd, V., 2002, Introducere în geografia spațiului rural, Edit. Presa Universitară Clujeană, Cluj-Napoca. 9. Surd, V., Bold, I., Zotic, V., Chira, Carmen, 2005, Amenajarea teritoriului și infrastructuritehnice, Edit. Presa Univ. Clujeană, Cluj-Napoca. 10. Stugren, B., 1995, Ecologie generală, Edit. Did. și Pedag., București.		

* The content, respectively the number of hours allocated to each course / seminar / laboratory / project will be detailed during the 14 weeks of each semester of the academic year.

9. Corroboration of discipline content with the expectations of the epistemic community, professional associations and representative employers from the field corresponding to the study programme

The content of the discipline is found in the curriculum of the specialization of Environmental Engineering and from other university centers that have accredited these specializations.

10. Evaluation

Type of activity	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Percentage of the final grade
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10.4 Course	Assessment of accumulated theoretical knowledge	colloquium	50%
10.5 Seminar	Evaluation of the theoretical and practical knowledge accumulated at the seminar	test	50%
10.6 Laboratory			
10.7 Project			
10.8 Minimum standard of performance			
<ul style="list-style-type: none"> • Minimum grade 6 test • Minimum grade 5 colloquium 			

Date of completion

Signature of course holder**

Signature of seminar

laboratory/project holder **

Lecturer PhD. eng **AGUD**
(eliza_agud@yahoo.com)

ELIZALecturer PhD. eng **AGUD ELIZA**
(eliza_agud@yahoo.com)

Date of approval in the department

Signature of the Head of Department

Conf.univ. PhD.eng.**LASLO VASILE**

Dean signature

Prof. PhD. Eng. **CHEREJI IOAN**

** - Name, first name, academic degree and contact details (e-mail, web page, etc)will be specified.

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