Annex 6

DISCIPLINE DESCRIPTION

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	**BACHELOR**
1.6 Study programme/Qualification	**BIOTECHNICAL ENGINEERING AND ECOLOGICAL SYSTEM /ENGINEER**

2. Information on the discipline

2.1 Name of discipline			**ENVIRONMENTAL MANAGEMENT I**				
2.2 Course holder			Lecturer PhD eng. Oneț Aurelia				
2.3 Seminar/Laboratory/Project holder			Lecturer PhD eng.Oneț Aurelia				
2.4 Year of study	IV	2.5 Semester	VIII	2.6 Type of evaluation	Ex	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	4	out of which: 3.2 course	2	out of which 3.3 seminar/laboratory/project	2
3.4 Total hours in the curriculum	56	out of which: 3.5 course	28	out of which 3.6 seminar/laboratory/project	28

Time allotment	hours
Study assisted by manual, course support, bibliography and notes	17
Additional documentation in the library/ on specialised electronic platforms and in the field	10
Preparation of seminars/laboratories/ topics/reports, portfolios and essays	15
Tutorship	0
Examinations	2
Other activities.....	0

3.7 Total hours of individual study	**44**
3.9 Total hours per semester	**100**
3.10 Number of credits	4

4. Prerequisites (where appropriate)

4.1 curriculum	General ecology, Waste disposal, Air pollution, Hydrochemistry and water pollution, Pedology and soil pollution.
4.2 competences	Action ability: information capacity and documentation, group work, utilisation of informatics tehnologies and data processing; ability to apply knowledge actively and practically.

5. Conditions (where appropriate)

5.1. related to course	Using modern means of presentation and projection – video projector and computer
5.2. related to seminar/laboratory/ project	Using modern means of presentation and projection – video projector and computer

6. Specific competences acquired	
Professional competences	C5. Cooperation with institutions with responsibilities in environmental management and involvement in defining environmental policies and strategies C5.1 Definition and use of specific engineering terminology in connection with the multidisciplinary terminology specific to the field of environmental engineering C5.2 Identification of institutional responsibilities related to environmental protection, decision-making, administrative, monitoring and control C5.3 Identification of the problems specific to the field of environmental engineering and of the institutional and personal responsibilities related to their solving
Transversal	CT1. Identifying and observing professional ethics and deontology rules, assuming responsibility for decisions taken and related risks CT3. Effective use of information sources and communication resources and assisted professional training (portals, Internet, specialized software applications, databases, on-line courses, etc.) both

7.Objectives of discipline (coming from the specific competences acquired)

7.1 General objective	Knowledge of legislation and institutional framework in the field of environmental protection in order to define environmental policies and strategies.
7.2 Specific objectives	Acquiring specific notions of environmental management and how to plan an environmental management system in an organization. Knowledge of policies, strategies and programs for environmental protection in Romania and the EU.

8. Content*/

8.1 Course	Methods of teaching	No. of hours/Remarks
1. General notions of the environment and environmental protection	Lecture and video projector exposure	2
2. The role of environmental factors in business activity. Enterprise-environment relationship.	Lecture and video projector exposure	2
3. The institutional framework in the field of environmental protection.	Lecture and video projector exposure	4
4. Environmental protection strategy in Romania	Lecture and video projector exposure	4
5. Agenda 21 and environmental management	Lecture and video	4

	projector exposure	
6.Legislative framework and practices for implementation of the environmental management system	Lecture and video projector exposure	2
7. European Scheme of the Management and Environmental Audit	Lecture and video projector exposure	4
8. Issues on estimating the economic value of ecosystems.	Lecture and video projector exposure	4
9. Ecosystems management.	Lecture and video projector exposure	2

Bibliography

A. Culic, R. M. Petrescu, 2006, Management and waste framework, EFES, Cluj-Napoca, p. 14-15;

Anderson I.,1988, Environmental Management Tools for SMEs: A Handbook, CCEM, European Environment Agency;

Adil El Massi, 2003, Environmental Acquis of the European Union – presentation PERFECTLINK, Seminar Gdynia – Polonia;

Cristina Ionescu, 2003, "Environmental management politics";

Grecu, Iulia, 2003, The economy and environmental management, Europolis Publishing House, Constanţa;

Horaicu, Corneliu, 2004, Environmental integrated monitoring, Tipo Moldova Publishing House, Iaşi;

Jelev, I., 1999, *Environmental management,* University of Oradea Publishing House.

Jelev, I., Brejea R., *Applied environmental management systems,* University of Oradea Publishing House.

Oneţ Aurelia, 2012, Environmental management, University of Oradea Publishing House.

8.2 Seminar		
1. Specific terminology to environmental management	Debate	4
2. Environmental Actions Programs	Debate	4
3. European Environment Agency Regulation.	Debate	4
4.Management Plan for Biodiversity Conservation and Sustainable Development of the Danube Delta Biosphere Reserve	Debate	2
5.Strategic Action Plan for the Black Sea Rehabilitation and Protection	Debate	4
6. Functions and services of ecosystems.	Debate	4
7. Methods of estimating the economic value of ecosystems.	Debate	4
8. Evaluation of the knowledge	Debate	2

Bibliography

A. Culic, R. M. Petrescu, 2006, Management and waste framework, EFES, Cluj-Napoca, p. 14-15;

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* 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

By acquiring knowledge of environmental management, students acquire complex knowledge, in accordance with the partial competencies required for the possible occupations provided by RNCIS. The content of the course is adapted to the requirements of the epistemic community, professional associations and employers in the field of Environmental Engineering, as it addresses concepts regarding the environmental legislation and institutional framework as well as the national and international conventions and regulations that underlie the minimization of the impact of human activities on the environment surrounding. The course acquires useful knowledge both for environmental protection representatives from local authorities, industry and companies with activities in the field.

10. Evaluation

Type of activity	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Share in the final grade
10.4 Course	Presence at courses and knowledge of matter	Oral exam	70%
10.6 Laboratory	Attendance at seminars and active participation in seminars	Evaluation	30%
10.8 Minimum standard of performance. Ability to respond correctly to 50% of the questions asked			

Date of completion

Signature of course holder**

Signature of seminar laboratory/project holder **

Lecturer PhD eng. Oneț Aurelia
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e-mail: aurelia_onet@yahoo.com

Date of approval in the department

Signature of the Head of Department

Assistant professor PhD eng. Laslo Vasile
laslovasile@yahoo.com

Dean signature
Professor PhD eng. Chereji Ioan
ichereji@uoradea.ro

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