

Environmental management (IInd Year of study, IVth Semester)

Credit value (ECTS) 2

Course category

Specialized discipline (optional)

Course holder:

Lecturer PhD Radu-Adrian MORARU

Discipline objectives (course and practicum)

The hours of course and practical work are designed to support the students to acquire theoretical and practical knowledge in the field of environmental management and the role of the environmental management practices on the sustainable development; knowledge on the requirements regarding the implementation of the managerial control measures in the environmental field, according to the organisational policies, in order to comply with the environmental legislation in force; development of aptitudes to elaborate and to implement an environmental policy and environmental management systems, as well as to conduct the environmental audit in economic and administrative units.

Contents (syllabus)

Course (chapters/subchapters)
Environmental Management – general aspects: Object of study and the importance of discipline; Concept, objectives and features of the environmental management; Priorities of the environment protection for the developing countries; Legal framework regarding the Environment Protection; Institutions in charge in the field of environment protection.
Principles and instruments of the Environmental Management: Environmental Management Principles; Environmental Management Instrument; Environmental Management System (EMS); Environmental Standards.
EMAS – European Environmental Management and Audit Scheme: General presentation of EMAS; Short history of EMAS; Conditions for EMAS registration; Organisations that can apply for EMAS; Regulatory framework of EMAS in Romania.
Ecological Label and the Eco-labelling of Products and Services: Definition, importance, types of ecological labels; the Eco-Label of the European Union; Legal framework; Eligible products for eco-labelling; Advantages and characteristics of eco-labelling.
Environmental Audit: definitions and characteristics; Importance of the environmental audit; Potential disadvantages of the environmental audit; Environmental audit types and its objectives; Elements and principles of the environmental audit; Conducting the environmental audit sampling;
Waste Management: Theoretical approaches in waste management; Content, objectives and principles of waste management; The institutional, legal and regulatory framework of waste management; Waste classification; Product life cycle and the waste hierarchy; Waste flow.
Integration of the problems regarding the environmental conditions in economic practice. The effects of pollution and their analysis in relation with the anti-pollution costs; Setting the economic optimum for the anti-pollution activities; Economic tools in order to reduce the pollution level.

Practicum
Environmental indicators: Principles in defining and choosing the environmental indicators; Categories of environmental indicators; Types of approaches to set-up the environmental statistical system, OECD and UN-FDES frameworks for environmental indicators.
Identification of the environmental factors possibly affected by the developed economic-productive activities
Expenses to introduce an Environmental Management System
Differences and similarities between ISO 14001 și EMAS
Life Cycle Evaluation: Principles and characteristics of the ECV methodology; Phasdes and the application field; Analysis of the life cycle inventory; Evaluation of the life cycle impact; Interpretation of the life cycle.
Conducting Waste Audit in organisation: Audit Planning; Audit Conducting; Drawing-up the Action Plan; Implementation of the Program for Waste Reduction; Activities supporting the Audit.
Drawing-up the environmental balance sheet of an economic activity

References:

1. Ciurea, A., Cartas, V., Stanciu, C., Popescu, M. – *Managementul mediului*, Editura Didactică și Pedagogică, Bucuresti, 2005;
2. Man, C., Ivan, I – *Strategii în managementul deșeurilor și reziduurilor*, Cluj- Napoca, 1999;
3. Moraru, R.A. – *Managementul mediului*, Editura Ion Ionescu de la Brad, USAMV Iasi, 2018;
4. Panaite M., Nedeff. V., Măcărescu, B., Moșneguțu, E. – 2007 - *Auditul de mediu*, Ed. Alma Mater, Bacău.

Evaluation

Evaluation form	Evaluation Methods	Percentage of the final grade
Colloquium	written evaluation	65%
Appreciation of the activity during the semester	Oral assessment during the semester, verification tests	35%

Contact

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