

## **Environmental Management (Master in AGRIBUSINESS AND BUSINESS ADMINISTRATION, IInd Year of study, IIIrd SEMESTER)**

**Credit value (ECTS): 8**

### **Course category:**

deepening discipline (imposed)

### **Course holder:**

Lecturer Ph.D. **Radu-Adrian MORARU**

### **Discipline objectives (course and practical works)**

- provide students with the theoretical and practical knowledge in the field of environmental management and the role of environmental management practices on sustainable development.
- knowledge of the requirements regarding the implementation of management control practices on the environment field, consistent with the organization's policies to meet the regulations in force on the environment.
- acquiring informations about environmental management systems, standards, tools and methods used in environmental management
- improve the skills of coordinating the environmental audit in economic and administrative units.

### **Contents (syllabus)**

<b>Course (chapters/subchapters)</b>
<b>I. Environmental Management – General aspects:</b> The object of study and the importance of discipline; Concept, objectives and features of environmental management; Environmental policy and sustainable development; Environmental priorities for developing countries; The legal framework for Environmental Protection; Criteria and objectives for sustainable development of economic activity; Responsible and efficient management of resources; Institutions in the field of environmental protection
<b>II. Principles and instruments of Environmental Management:</b> Environmental Management Principles; Instruments of Environmental Management; Environmental Management System (EMS); Environmental Standards
<b>III. EMAS – Eco-Management and Audit Scheme of the European Environment:</b> Overview EMAS: definition, characteristics, objectives; Brief history of EMAS; Conditions for EMAS registration; Organisations that can apply for EMAS; EMAS regulatory framework in Romania
<b>IV Ecolabel and Eco-Labeling of Products and Services:</b> Definition, importance, types of eco-labels; Eco-label of European Union; Legislative framework; Eligible products for eco-labeling; The advantages and characteristics of eco-labeling

<p><b>V. Environmental audit:</b> The conceptual framework of environmental audit: definitions and characteristics; International Organization of Supreme Audit Institutions (INTOSAI) and environment audit; The importance of the environmental audit; Potential disadvantages of the environmental audit; The types of environmental audit and its objectives; Elements and principles of environmental auditing; Collecting environmental audit evidence; The audit of pollution of water, air and biodiversity</p>
<p><b>VI Waste Management:</b> Conceptual approaches in waste management; The content, objectives and principles of waste management; The institutional, legislative and regulatory waste management; Waste classification; The life cycle of products and waste hierarchy; The impact of waste on human health and the environment; The elements of waste management policy; Policies and measures for waste management sector; Waste streams</p>
<p><b>VII Waste management audit:</b> Key issues addressed in the waste management audit; Identification of risks to the environment and public health; Identification of relevant actors and their responsibilities; Analysis of the waste stream; The selection of audit themes (topics)</p>

Practical works
<p><b>1. Environmental indicators:</b> Principles in the definition and selection of environmental indicators; Categories of environmental indicators; Types of approaches for implementing environmental statistical system; OECD and UN-FDES schemes framework</p>
<p><b>2. Expenses for the introduction of an EMS</b></p>
<p><b>3. EMAS implementation phases</b></p>
<p><b>4. Differences and similarities between ISO 14001 and EMAS</b></p>
<p><b>5. Life Cycle Assessment:</b> Principles and characteristics of LCA methodology; Phases and scope; Life cycle inventory analysis; Life cycle impact assessment; Interpretation of life cycle</p>
<p><b>6 The procedure for obtaining European Ecolabel</b></p>
<p><b>7. The steps and stages of the environmental audit:</b> Planning the environmental audit; Execution of environmental audit (pre-audit activities, audit field activity, post-audit activity); The audit “follow-up”.</p>
<p><b>8. Waste audit in an organization:</b> Audit Planning; Performing audits; Develop Action Plan; Programme implementation to reduce waste; Audit support activities.</p>
<p><b>9 . Preparing the environmental balance of economic activity</b></p>
<p><b>10. Integrating environmental issues into economic practice conditions:</b> Effects of pollution and their analysis in relation to pollution abatement costs; Economic optimum setting for anti-pollution activities; Economic levers to reduce pollution</p>

### **Bibliography**

1. Barrow, C.J. - *Environmental Management for Sustainable Development*, Second Edition, Routledge, New York, 2006;
2. Frășineanu, I., Băloiu, L. – *Economia și protecția mediului înconjurător*, Editura ASE, București, 2007;
3. Man, C., Ivan, I – *Strategii în managementul deșeurilor și reziduurilor*, Cluj- Napoca, 1999;
4. Macoveanu Matei, Ciubotă-Roșie Camelia – *Auditul de mediu*, Editura Ecozone, Iași, ediția a-3-a, Seria Managementul mediului, 2008
5. Moraru, R.A. – 2014 – *Managementul mediului*, suport de curs, USAMV Iasi, 2014;
6. Petrescu I. – *Managementul mediului*, Editura Expert, București, 2005
7. Rojanschi, V., Bran, F., - *Politici și strategii de mediu*, Editura Economică, București, 2002

## Final Evaluation

Evaluation form	Evaluation Methods	Percentage of the final grade
Examen	Written examination	65%
Appreciation of the activity during the semester	Oral assessment during the semester, partial tests and verification work	35%

## Contact

**Lecturer Ph.D. Radu-Adrian MORARU**

Faculty of Agriculture - USAMV Iași

Aleea Mihail Sadoveanu nr. 3, Iași, 700490, Romania

phone: 0040 232 407517, mobil phone: 0040.740.587.139

E-mail: [ramoraru@yahoo.com](mailto:ramoraru@yahoo.com)