

Description of Discipline

| Title of Discipline: <i>Ecological Economics</i> | | | | | |
|--|----------|--------------------|--------------|---|-------------------------|
| Semester | Duration | Type of Discipline | ECTS Credits | Academic Workload | Language of Instruction |
| 8 | 150 hrs. | compulsory | 5 | 50 hours of classroom training, 100 hours of self-study | Ukrainian |

| Learning Outcomes | Teaching Methods | Evaluation Methods |
|--|---|--|
| LO2. To understand the principles of economic science, especially the operation of economic systems. | Lectures, taking notes, presentation, watching videos, practical classes where students solve problem educational tasks | Oral and written evaluation, final tests, pass-fail test |
| LO6. To use professional argumentation to convey information, ideas, problems, and solutions to professionals and non-professionals in the field of economic activity. | Illustration, presentation, instructing, explanation, exercise and practice | Colloquium, presentation, pass-fail test |
| LO13. To perform an interdisciplinary analysis of social-economic phenomena and problems in one or more professional fields, taking into account the risks and potential social-economic consequences. | Interdisciplinary trainings that develop professional-analytical and teamwork skills under uncertain conditions | Reports, graphic methods, pass-fail test |
| LO14. To use regulatory and legal acts regulating professional activity. | Lectures, taking notes, presentation, practical classes where students solve problem educational tasks | Colloquium, pass-fail test |
| LO17. To be able to be flexible and adapt to new situations when working with new objects under uncertain conditions. | Discussion, problem-oriented tasks, presentation | Colloquium, reports, pass-fail test |

| Title of Discipline / Ecological Economics | | | | |
|---|----------|--------------------|--------------|--|
| Semester | Duration | Type of Discipline | ECTS Credits | Student Workload |
| 6 | 120 | elective | 4 | 30 hours of teaching, 90 hours of self-study |

| Requirements for Participation | Type of examination (oral, written, term paper, etc.) | Methods of teaching and learning (lectures, seminars, etc.) | Discipline Coordinator |
|---|--|--|-------------------------------|
| Completed disciplines 'Political Economy', 'Fundamentals of Systems Theory', 'Microeconomics', 'Macroeconomics' | Written exam | Lectures, practical classes | O. Minina |
| Learning Outcomes | | | |
| <p>GC2. Ability to preserve moral, cultural, scientific values and increase the achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology, use different types and forms of physical activity rest and lead a healthy lifestyle.</p> <p>GC4. Ability to apply knowledge in practical situations.</p> <p>GC5. Ability to communicate in the state language both orally and in writing.</p> <p>GC7. Skills in the use of information and communication technologies.</p> <p>GC8. Ability to search, process and analyze information from various sources.</p> <p>GC11. Ability to make informed decisions.</p> <p>GC13. The ability to act socially responsibly and consciously.</p> <p>GC14. Knowledge of current issues and the main tasks of life safety and the ability to determine the scope of their responsibilities for the performance of professional tasks, taking into account the risk of hazards that can cause emergencies and lead to adverse consequences on the premises.</p> <p>GC15. Ability to provide assistance and advice to employees and the public on practical issues of life safety and protection in emergencies.</p> <p>SC7. Ability to use computer technology and data processing software to solve economic problems, analyze information and prepare analytical reports.</p> <p>SC10. Ability to use modern sources of economic, social, managerial, accounting information for the preparation of official documents and analytical reports.</p> <p>SC14. Ability to analyze in depth problems and phenomena in one or more professional areas, taking into account economic risks and possible socio-economic consequences.</p> <p>SC34. Ability to navigate the basic methods and systems of man-made safety, reasonably choose known devices, systems and methods of protection of man and the environment from hazards.</p> <p>PLO2. Understand the principles of economics, features of economic systems.</p> <p>PLO5. Apply analytical and methodological tools to substantiate proposals and make management decisions by various economic agents (individuals, households, enterprises and public authorities).</p> <p>PLO6. Use professional reasoning to convey information, ideas, problems and ways to solve them to professionals and non-specialists in the field of economic activity.</p> <p>PLO10. Apply the acquired theoretical knowledge to solve practical problems and meaningfully interpret the results.</p> <p>PLO11. Identify sources and understand the methodology for determining and methods of obtaining socio-economic data, collect and analyze the necessary information, calculate economic and social indicators.</p> <p>PLO12. Be able to use data, provide arguments, critically evaluate logic and draw conclusions from scientific and analytical texts on economics.</p> <p>PLO13. Perform interdisciplinary analysis of socio-economic phenomena and problems in one or more professional areas, taking into account the risks and possible socio-economic consequences.</p> <p>PLO14. Use regulations and legal acts governing professional activities.</p> <p>PLO15. Use information and communication technologies to solve socio-economic problems, prepare and present analytical reports.</p> <p>PLO16. Be able to think abstractly, apply analysis and synthesis to identify key characteristics of economic systems at different levels, as well as the behavior of their subjects.</p> <p>PLO17. Demonstrate flexibility and adaptability in new situations, in working with new objects, and in uncertain conditions. PLO17. Demonstrate flexibility and adaptability in new situations,</p> | | | |

in working with new objects, and in uncertain conditions.

PLO19. Be able to independently identify economic problems in the analysis of specific situations, to suggest ways to solve them.

PLO20. To form and evaluate indicators of efficiency of activity of the enterprises and establishments taking into account factors of external and internal environment.

PLO23. Assess possible risks, socio-economic consequences of management decisions.

PLO24. Have knowledge of ensuring safe working conditions and the environment when conducting research in production activities.

PLO25. Select and use the necessary scientific, methodological and analytical tools to manage economic activity.

PLO28. Ability to provide assistance and advice to employees and the public on practical issues of life safety and protection in emergencies.

Contents

MODULE 1. THEORETICAL FOUNDATIONS OF ECOLOGICAL ECONOMICS

Topic 1. Theoretical and methodological aspects of operation of the economy

Needs, production, economic resources and the problem of choice. Market as the basis of modern economy, its structure and mechanism of operation. The main features of the modern market economy.

Topic 2. Content and tasks of ecological economics

Ecological economics and the concept of sustainable development. The modern economic system in the context of the postulates of ecological economics. Transition from the closed system to the open one. The concept of the natural capital. Strong and weak sustainability of social-economic development.

Topic 3. Global ecological and economic system and factors of its development

The biosphere as a shell of life. Technosphere. Ecosphere as a global ecological and economic system. Environmental factor in the processes of development of social-economic systems.

Topic 4. Natural factors and processes of anthropogenic impact on nature

Classification of natural factors. Classification of processes of anthropogenic impact on nature.

Topic 5. Pollution as the most dangerous type of anthropogenic impact

Types of pollution. Air pollution and problems of the atmosphere protection. Water pollution and problems of the hydrosphere protection. Pollution and disturbance of the geological environment and soils.

MODULE 2. METHODOLOGICAL APPROACHES AND TOOLS OF ECOLOGICAL ECONOMICS

Topic 6. Natural factors in the system of commodity-money relations

Accounting for natural factors in the economic system. Functions of nature and economic properties of natural factors. Fundamentals of economic assessment of natural factors.

Topic 7. Ecological and economic tools

Ecological and economic instruments: principles of formation and mechanisms of implementation. Forms of ecological and economic instruments.

Topic 8. Economic damage from environmental disruption

The essence of ecological and economic damage. Factors of damage formation. Cost analysis of damage.

Topic 9. Eco-efficiency and the problem of improving it under the conditions of sustainable development

The concept of eco-efficiency. Methodical approaches to eco-efficiency assessment. Motivation and promotion of eco-efficiency in the context of sustainable development.

Exemplary Literature

1. Deili G. Out of growth. Economic theory of sustainable development. - K .: Intelsphere, 2002. - 298 p.
2. Environmental entrepreneurship: Textbook. / V.Ya. Shevchuk, Yu.M. Satalkin, Yu.M. Navrotsky and others. - K .: Meta, 2001. - 191 p.
3. Kizima R.A. Ecology: textbook. - Kharkiv: "Burun Kniga", 2010. - 304 p.
4. Melnik L.G. Ecological economics: Textbook. - 3rd ed. Sumy: VTD "University Book", 2006. - 367 p.
5. Odum Yu. Ecology: In 2 volumes. - M .: Mir, 1986. - T. 1. - 328 p .; Vol. 2. - 376 p.
6. Socio-economic potential of sustainable development: Textbook / Ed. prof. L.G. Melnik (Ukraine) and prof. L. Hansa (Belgium). - Sumy: "University Book", 2007. - 1120 p.