



Course Syllabus

1. Course Title:

Management of Sustainable Ecosystems

2. Academic Level:

Master

3. ECTS Credits:

6 ECTS

4. Semester:

3, autumn semester

5. School/Department:

Faculty of Management

6. Location:

200/1 Stachki Avenue, Rostov-on-Don

7. Instructor:

Prof. Elena Lazareva, e-mail: elazareva@sfedu.ru

8. Language of Instruction:

English

9. Course Description:

Sustainable development is the organizing principle for meeting human development goals while simultaneously sustaining the ability of natural systems to provide the natural resources and ecosystem services based upon which the economy and society depend. The desired result is a state of society where living conditions and resources are used to continue to meet human needs without undermining the integrity and stability of the natural system. Sustainable development can be defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

10. Course Aims:

Goals of the course: to deepen and broaden understanding of the key concepts of sustainable management of multilevel socio-economic ecosystems under conditions of innovation and digital transformation, as well as to learn how to apply effective management tools to solve the problem of increasing the sustainability of economic trends, the activation of innovative processes in the spatial and temporal scales.

11. Specific entry requirements (if any):

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12. Course Content:

Module 1. Theoretical Foundations of Management of Sustainable Ecosystems

The concept of ecosystems and its application to modern economic management. Ecosystem approach to doing business as a new model of sustainable management in the context of innovation-digital transformation

Socio-economic, innovation and digital ecosystems in the light of the systems paradigm. Analysis of the principles, criteria and indicators of sustainable ecosystems management

Project management of socio-economic ecosystems' sustainable development. Project types and project management tools

Strategic policy and methods of sustainable development risk (SDR) management

Module 2. Mechanisms for the implementation of Sustainable Ecosystems management

Sustainability as a driver for the creation and development of innovations (electric vehicles, renewable energy, biofabrication)

Ecosystem management and opportunities for the development of international business (environmental factor as a challenge and competitive advantage)

Investment in «green» economy sectors and environmentally responsible finance («green» finance)

Strategic policy of the main market participants and instruments of SER management realization. Main types of SER risks in business and methods for their minimizing

Public-private partnership in the implementation of sustainable ecosystems projects

13. Intended Learning Outcomes:

Knowledge:

- research organization methodology groups;
- a technique for constructing forecast models;
- a mechanism of making managerial decisions on the use of received during research of scientific results

Skills:

- organize effective work inside research team;
- to predict the dynamics and development trends of the green economy, its systems, based on the use of formalized models and methods;
- research management skills team in the framework of the project;
- skills in the development of formal models to predict changes in the studied object
- develop recommendations for the practical use of the research results;
- skills of making managerial decisions on the practical implementation of the received scientific results.

14. Learning and Teaching Methods:

There will be 10 lectures as below and 20 practical classes on the same topics Follow the instructions in the course guide to progress through the course. The below are the details. When fulfilling written tasks (essays, individual tasks). When writing a task:

1. A student was self-reliant in the task, showed completeness, preparedness of the proposed solutions.

2. Showed the level of creativity, originality in the disclosure of topics, approaches, and proposed solutions.

3. Demonstrated reasonableness of the proposed solutions, approaches, conclusions, complete bibliography, and citation.

4. Competently designed the task: there is a compliance with the standard requirements, high quality of sketches, diagrams, and drawings.

When defending a work:

- Prepared high-quality report on the following criteria: composition, full disclosure of the work, approaches, results; reasonableness, conclusiveness.

- Showed the scope and depth of knowledge on the topic (or subject), wide knowledge, interdisciplinary relationships.

- Demonstrated pedagogical orientation: culture of speech, use of visual aids.

- Gave substantive answers to the lecturer's questions: completeness, reasonableness, conclusiveness, intention to use the answers to successfully cover the topic and strengths of the work.

- Revealed his or her business and volitional qualities: pursuance of achieving high results, readiness for discussion, kindness, and sociability.

15. Methods of Assessment/Final assessment information:

- Students' self-guided reading of the educational material, course books and reference materials with follow-up free discussion based on the material studied;
 - Implementation of supporting (illustrating) data, involving the use of multimedia presentation equipment containing basic terms, graphs and tables;
 - Analysis of Case-Study for the students to understand the nature and significance of applied tasks under consideration;
 - Testing;
 - Essay writing;
 - Fulfillment of individual tasks on the topics and examples provided.
- Final certification - EXAM

16. Reading List:

- John Handmer (2017) Ecology, Uncertainty and Policy Managing Ecosystems for Sustainability
- Claudia Baldwin, Séverine van Bommel (2023) Rural Development for Sustainable Social-ecological Systems Putting Communities First by Springer
- Kanchan Deoli Bahukhandi, Nitin Kamboj, Vishal Kamboj (2023) Environmental Pollution and Natural Resource Management by Springer
- Michael Zhang (2023) Strategic Management and Sustainability Transitions Theory and Practice
- Jan Jonker (2021) Organizing for Sustainability: A Guide to Developing New Business Models
- Rob van Tulder, Eveline van Mil (2022) Principles of Sustainable Business
- Frameworks for Corporate Action on the SDGs by Taylor & Francis