Sustainable Development

**Spring semester, 2021-2022**

***The course is proposed for students in the academic year 2020-2021 as an optional one.***

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| --- | --- |
| Cooordinator | **Utkina Kateryna** |
| Credits | 3 ECTS (optional course), 24 in-class hours |
| Lecturers | **Kateryna Utkina** (Karazin Institute of Environmental Sciences, V.N. Karazin Kharkiv National University, Ukraine)  **Inna Bodak** (Karazin Institute of Environmental Sciences, V.N. Karazin Kharkiv National University, Ukraine) |
| Level | PhD students |
| Host institution | Karazin Institute of Environmental Sciences, V.N. Karazin Kharkiv National University, Ukraine |
| Course duration | February - May |

### Summary

*This 3 ECTS course aims to development of theoretical and practical knowledge about sustainable development (SD). It provide students with detailed information about the history of SD development, key international and UA national legislation, modern approaches and tools. The course contains individual and group assignments aimed at developing practical skills on development of reginal SD plans and applying SD tools for environmental management activity.*

### Target student audiences

PhD students, study program – Constructive Geography and Sustainable Use of Natural Resources; Earth Sciences (Code No. 103)

### Prerequisites

Required courses (or equivalents):

* Phylosophy of Science;
* Science Methodology;
* Environmental Policy and Management;
* Natural Resource Science;

### Aims and objectives

The main course objective is to develop basic knowledge on the patterns of functioning of social, economic and environmental systems and ensuring the conditions for their sustainable development.

The course is aimed at the following: to introduce existing approaches and ways of transition to sustainable development in world practice; to help PhD students to study the concepts of sustainable development, to study ways on implementation the principles of sustainable development in the main sectors of social development; to acquire practical skills in the field of development and implementation of medium- and long-term programs of transition to sustainable development at the regional and local levels

### General learning outcomes:

By the end of the course, successful students will have:

*Knowledge and understanding:*

• Theoretical foundations, modern methodological approaches in research in the field of Earth sciences.

• Mechanisms of interrelations in the system "nature - population - economy".

*Skills:*

• To develop scientifically sound recommendations to support management decisions in business.

### Overview of sessions and teaching methods

The course combines interactive group and individual self-reflective methods of teaching and learning.

The course includes in-class work (lectures, practical works and seminars) and independent work. There are two sections:

Section 1 - Theoretical and conceptual principles of sustainable development strategy.

Topic 1. Prerequisites for the development of sustainable development ideas. Theoretical principles of sustainable development.

Topic 2. Socio-economic growth and sustainable development.

Topic 3. Sustainable Development goals. Indicators of sustainable development.

Topic 4. International activities in the field of sustainable development.

Section 2. Ukraine in the context of the transition to sustainable development.

Topic 5. National features of Ukraine's transition to sustainable development.

Topic 6. Indicators for assessing the sustainable development of the regions of Ukraine.

Topic 7. Local action plan for environmental protection.

Topic 8. Goals and objectives of education on sustainable development of Ukraine.

Topics of practical works and seminars:

* Alternative strategies for human development.
* Analysis of the dynamics of the world ranking of countries according to the main indicators and indices of sustainable development.
* International activities and legislation in the field of sustainable development.
* Theoretical and conceptual principles of sustainable development strategy.
* Transition of Ukraine to sustainable development: national features, realities and prospects.
* Analysis of the profiles of the regions of Ukraine according to the economic, ecological and socio-institutional dimensions of sustainable development.
* Development of local environmental action plans for small settlements.
* Ukraine in the context of transition to sustainable development.

### Course workload

The table below summarizes course workload distribution:

|  |  |  |  |
| --- | --- | --- | --- |
| **Activities** | **Learning outcomes** | **Assessment** | **Estimated workload (hours)** |
| **In-class activities** | | | |
| Lectures | Understanding of basics, concepts, methodology and tools of SD | Class participation | 4 |
| Practical works | Ability to perform analysis of dynamics of the world ranking of countries according to the main indicators and indices of sustainable development.  Ability to analyse the profiles of the regions of Ukraine according to the economic, ecological and socio-institutional dimensions of sustainable development  Ability to develop local environmental action plans for small settlements | Paper assignments and presentations | 6 |
| Seminars | Understanding of key topics proposed for analysis and discussion | Class participation and preparedness for assignments | 14 |
| **Independent work** | | | |
| Individual assignments:   * Development of presentations * Writing paper assignments | Ability to find related literature and data, to interpret data, to identify factors, to perform analysis and visualization of information  . | Quality of presentations and paper assignments | 40 |
| Reading and discussion of assigned papers for seminars and preparation for lectures, oral interviews and tests | Familiarity with and ability to critically and creatively discuss key concepts, tools and methods as presented in the literature | Class participation, creative and active contribution to discussion, quality of test and interviews | 26 |
| ***Total*** |  |  | ***90*** |

### Grading

The following table defines the criteria for evaluating the student's work in studying the materials of the course. As a result, the student is able to get a maximum score of 100 points. The minimum number of points required is 50 points.

In the course of studying the course a student receives points for performing various tasks.

|  |  |  |
| --- | --- | --- |
| **Educational activity** | **Max** | **Min** |
| In-class discussions during lectures | 4 | 2 |
| Practical work 1 | 8 | 4 |
| Practical work 2 | 9 | 5 |
| Practical work 3 | 10 | 5 |
| Seminar 1 | 5 | 2 |
| Seminar 2 | 6 | 3 |
| Seminar 3 | 6 | 3 |
| Seminar 4 | 6 | 3 |
| Seminar 5 | 6 | 3 |
| Final control | 40 | 20 |
| Total | 100 | 50 |

At the end of the course the student will have an exam. Grading system is presented below:

|  |  |
| --- | --- |
| **Scores** | **Mark** |
| 90 – 100 | Excellent |
| 70-89 | Good |
| 50-69 | Satisfactory |
| 1-49 | Not passed |

### Course schedule

*Dates and time will be provided later.*

The overall schedule is provided below:

|  |  |  |  |
| --- | --- | --- | --- |
| **Day** | **Time** | **Topic** | **Lecturer** |
| Day 1 | 2 hours | Lecture 1 | K.Utkina |
| Day 2 | 2 hours | Practical work 1 | K.Utkina |
| Day 3 | 2 hours | Seminar 1 | K.Utkina |
| Day 4 | 2 hours | Seminar 2 – part 1 | K.Utkina |
| Day 5 | 2 hours | Seminar 2 – part 2 | K.Utkina |
| Day 6 | 2 hours | Seminar 3 | I. Bodak |
| Day 7 | 2 hours | Lecture 2 | K.Utkina |
| Day 8 | 2 hours | Practical work 2 | K.Utkina |
| Day 9 | 2 hours | Practical work 3 | I. Bodak |
| Day 10 | 2 hours | Seminar 4 | K.Utkina |
| Day 11 | 2 hours | Seminar 5 – part 1 | K.Utkina |
| Day 12 | 2 hours | Seminar 5 – part 2 | K.Utkina |
| Day 13 | 2 hours | Final test | K.Utkina,  I. Bodak |

### Course assignments

The course includes the following practical works and seminars:

|  |  |
| --- | --- |
| **Topic** | **Number of hours** |
| Seminar 1  Alternative strategies for human development | 2 |
| Practical work 1  Analysis of the dynamics of the world ranking of countries according to the main indicators and indices of sustainable development | 2 |
| Seminar 2  International activities and legislation in the field of sustainable development | 4 |
| Seminar 3  Theoretical and conceptual principles of sustainable development strategy | 2 |
| Seminar 4  Transition of Ukraine to sustainable development: national features, realities and prospects | 2 |
| Practical work 2  Analysis of the profiles of the regions of Ukraine according to the economic, ecological and socio-institutional dimensions of sustainable development | 2 |
| Practical work 3  Development of local environmental action plans for small settlements | 2 |
| Seminar 5  Ukraine in the context of transition to sustainable development | 4 |

### Literature

Literature Review Sustainable Development Approaches for Rural Development and Poverty Alleviation & Community Capacity Building for Rural Development and Poverty Alleviation Christian R. Bueno Montaldo. May 2013, Wonju - <https://sustainabledevelopment.un.org/content/documents/877LR%20Sustainable%20Development%20v2.pdf>

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[Pedro Mateus Das Neves](https://www.researchgate.net/profile/Pedro_Mateus_Das_Neves?_sg%5B0%5D=NHpZb3PmTdaFq4pXC4m1hMFM1_fW6rj2J9iiQ7tPFlAJKvc_HHUTREJ09t2IZ2WjdtDi4mI.G9GxjnxY2RnimIAqUeMVkRdS6P_h9Rp2MrKNOyf3sQJz0aJMydquyla1gg9akDfmJjufe6DlvXfi1uxEAXwqCw&_sg%5B1%5D=2sgXaHIEmvD4JBouXltDy_KL94sPN1Ok7-j29iYZbN4XHDsggGCyk5O3m4oP89Re47soGi4.V3Az0y24tuiNjNbzm0St4N3YwrYE7oz29mPSW20ua0nMYCDG0wt4mpb6QakB6ASGuO976SwRS-0vK7EZcTBfag) (2018), Literature Review On Sustainable Development - The spirit and critics of SD and SDGs, DOI: [10.13148/PN.2018.30.01.006](https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.13148%2FPN.2018.30.01.006?_sg%5B0%5D=kKXfdx90I4ZffAweYQEINHwI8YzHHwzN9AWPGQxH7em-rZvP4_vFyCdB7PXc8eJvrNWPKoVThV-AWSFBU0f82iNeuw.OWFQO0ngCm9qStPnxmgfrP7xbO4lljaaimoBCqttihTAe9TG5y54vZgF5qfdebBYHYaRm053bN5rYFAA6yHRPQ)

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Lam, David (2005) - How the World Survived the Population Bomb: An Economic Perspective, published in The Economics of Sustainable Development, W.E. Upjohn Institute for Employment Research, Michigan

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