

SYLLABUS:

Sustainability

Course name: Sustainable Development / Sustainability
 Course index: ENVI502
 Number of credits: 3 ECTS/6 MCTS
 Period: Fall/Spring semester

Host institution	National University of Mongolia, School of Engineering and Applied Sciences
Lecturers	Ph.D S. Enkhsetseg, Ph.D D.Davaadorj
Level	BSc, MSc course
Course type	Major course
Course duration	16 weeks
New/Revised	A newly developed
E-course link	https://online.num.edu.mn/dashboard

Summary

The most critical resources for the survival of future generations are climate stability and biodiversity. Therefore, we have to respect the planetary boundaries of economic activity today. However, today many people are still far from being able to meet their basic needs, especially in developing countries. SD not only addresses the question of inter-generational justice but also this intra-generational issue: How to improve the life of the poor without overburdening the ecosystems? This is a challenge for individual lifestyles (especially in rich nations), for companies and for government policy.

The main purpose of this course is to observe and evaluate the process of global development to implement policies and strategies to ensure sustainable development at the international level, and to use the mechanism of global multilateral cooperation in the field of environment to ensure Mongolia's green growth strategy and sustainable development. training of national specialists. In doing so, we will get acquainted with interdisciplinary research methods in the field of sustainable development, international relations and international conflicts. The topic of this course is covered in 6 modules, which analyze theoretical and practical issues based on case studies. In particular, it aims to introduce students to international events, perspectives and research trends.

Sustainability lies at the intersection of the environment, society and economics. This course explores the concepts of sustainable development at different geographical scales (local, national and international). We examine the applications, indicators, measurement tools of sustainable development for analysis and decision making in support of environmentally sustainable development from a geographic perspective. Case studies and problem-solving exercises will be used to stimulate learning and provide practical experience in addressing sustainable development issues.

Target student audiences and Prerequisites

This core course is required for all students in the Special Concentration and Major and will introduce the elements of the academic program in Sustainable Development. Weekly discussions will explore the breadth of subject matter and the multidisciplinary nature of the scholarship.

Aims and objectives

OBJECTIVES AND SIGNIFICANCE OF THE COURSE

The main goal of this course is to observe and evaluate the global development process of implementing policies and strategies to ensure sustainable development at the international level, to use the mechanisms of global multilateral cooperation in the field of environment optimally for the green development strategy of MU and to ensure sustainable development. is to train national experts. In doing so, sustainable development will be introduced to multidisciplinary research methods within the context of international relations and conflicts between countries.

COURSE CONTENT

The history of the development of global cooperation based on the concept of sustainable development is considered in connection with the historical events of the 20th and early 21st centuries, based on interdisciplinary research methods. The development strategies of the countries are different, but common goals, values, concepts and development models are becoming increasingly similar due to the influence of globalization and cooperation, climate change, warming, air pollution, international marine and space resources, human habitat improvement, environmental protection will be considered in connection with the common desire to use together in the direction. In doing so, we will compare the implementation of policies and international cooperation projects and programs to identify and implement the problems of Mongolia's HCW within the framework of 17 goals of sustainable development.

This subject is contained to compare the historical events of XX and XXI with global cooperation. The development strategies are different, based on the similar goal, values, concepts, and development models are becoming more and more aligned through globalization and cooperation. Climate change, global warming, air pollution, international marine and space resources will be considered in connection with the common desire to share. It will compare the implementation of policies and international cooperation projects and programs to identify and implement the environmental problems in Mongolia within the framework of the 17 Sustainable Development Goals

The authentic tasks

General learning outcomes:

By the end of the course, successful students will:

Knowledge	<ul style="list-style-type: none"> ~ Examine critically the 17 newly minted UN Sustainable Development Goals ~ Understand the historical evolution, key theories, and concepts of sustainable development. ~ Articulate the major issues affecting sustainable development and how sustainable development can be achieved in practice.
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Comprehensive	<ul style="list-style-type: none"> ~ Explore the challenges the society faces in making transition to renewable resource use. ~ Discover the science, technology, economics, and politics underlying the concepts of sustainability. ~ Understand the implications of overuse of resources, population growth and economic growth and sustainability.
Application	<ul style="list-style-type: none"> ~ Apply critical thinking skills to evaluate the quality, credibility and limitations of an argument or a solution using appropriate evidence or resources. ~ Identify and apply methods for assessing the achievement of sustainable development
Analysis	<ul style="list-style-type: none"> ~ Analyze arguments, similarities, and disagreements in the sustainability debate.
Synthesis	<ul style="list-style-type: none"> ~ Communicate effectively in both oral and written forms, applying appropriate rhetorical standards (e.g., audience adaptation, language, argument, organization, evidence, etc.) ~ Develop skills that will enable students to understand attitudes on individuals, society and their role regarding causes and solutions in the field of sustainable development.

Overview of sessions and teaching methods

The course will make most of interactive and self-reflective methods of teaching and learning and, where possible, avoid standing lectures and presentations.

Learning methods	<ul style="list-style-type: none"> ~ Video presentations ~ Interviews, surveys, fieldtrip, group work, written articles/essay ~ Project Based Learning ~ Literature review ~ Stakeholder analysis/client consultancy ~ Case studies ~
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- Understand the practice and policy of sustainable pathways to development.
- Appreciate some of the scientific underpinnings of sustainability practice and how policy makers are trying to apply it for better governance of scarce resources.
 - Apply relevant aspects of the science and policies of sustainable development to your own practice as a development leader.
 - Understand how various attributes of sustainability (environmental, economic and social) can be applied by development leaders.
 - Gain additional scientific knowledge regarding planetary boundaries and their influence on international economic development.
 - Be aware of the current international policy landscape for the Sustainable Development Goals

Course workload

The table below summarizes course workload distribution:

Activities	Learning outcomes	Assessment	Workload (hours)
In-class activities			
Lectures	Understanding theories, concepts, methodology and tools	Class participation	
Moderated in-class discussions	Understanding various policy and management contexts and common problems in communication in environmental governance	Class participation and preparedness for discussions	
In-class assignments, field assignment	Understanding various policy and management contexts and common problems in communication in environmental governance	Class participation and preparedness for assignments	
Reading and discussion of assigned papers for seminars and preparation for lectures	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	
Group presentation	Ability to interpret data, to analyze audience, and to use the concepts, tools, and methods for communicating the EDP	Quality of group assignments and individual presentations	
Independent work			
Group work: - Contribution to the group case-study projects - Contribution to the preparation and delivery of individual presentation - Contribution to the web-application	Ability to interpret data, to analyze audience, and to use the concepts, tools, and methods for communicating information to all participants Plan and develop a energy development plan (EDP), be aware of information visualization tools and methods	Quality of group assignments and individual presentations	
Course group assignment	Ability to conceptualize and frame an environmental governance problem, find related literature and data, interpret data, use the concepts, tools and methods covered in the course, and draw policy/management relevant conclusions	Quality of developed EDP and their presentation	
Group presentation	Ability to interpret data, to analyze audience, and to use the concepts, tools, and methods for communicating the EDP	Quality of group assignments and individual presentations	
Total			

Grading

The students' performance will be based on the following:

Assessment	Progress assessment (40%): ~ Exercise (20%): students have to complete the quiz or exercise of each topic. ~ Homework (20%): 1. Environmental data and indicators of EDP (10%), one essay for selected paper reading (10%). Final assessment (30%): ~ Group report (30%): The students will be divided into groups of 4-5 students and choose 1 topic among 6 topics and complete the group project report according to the specific requirements of each topic. Final examination (30%)				
Evaluation	A (8,5 – 10)	Evaluation	95-100	A	4.0

EU system	B (7,0 – 8,4) C (5,5 - 6,9) D (4,0 – 5,4)	MN system	90-94 85-89 80-84 75-79 70-74 65-69 60-64 0-59	A- B- C- D- D- F	3.6 3.1 2.7 2.3 1.9 1.4 1.0 0.0
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Course schedule

Week	In-class hours	Topics	Type
1	2	The Concept of Sustainable Development: Origin and development of ideas and concepts of sustainable development and trends	Lecture
	2	Mongolian Goals and Strategies: Implementation of 17 objectives	Seminar
2	2	Inclusive growth: wages, consumption and lifestyles	Lecture
	2	Reasons for the change in the development perspective of the XXI century	Seminar
3	2	Sustainable Development Yardsticks: Measuring Progress and Success	Lecture
	2	Values for sustainable development Socio-economic indicators of TC	Seminar
4	2	World Biological diversity, biodiversity	Lecture
	2	The noosphere – the challenge of the Anthropocene	Seminar
5	2	Public health problems caused by food supply and environmental quality	Lecture
	2	International food and food supply and access- case	Seminar
6	2	Economic tools for sustainable development and challenges in their implementation	Lecture
	2	World challenges: Poverty, Food Security and	Seminar
7	2	Mechanism of the Public-Private Partnership of the Sustainable Development Strategy	Lecture
	2	Mongolian case in PPP /expert's talk/	Seminar
8	2	The Global Institutional System and cooperation mechanism in the regional and international level: NGO mechanism	Lecture
	2	Environmental problems in Mongolian Society	Seminar
9	2	Multilateral Mechanism for Investment Financing for Sustainable Development	Lecture
	2	International multilateral cooperation: international organizations concessions – economic development aids	Seminar
10	2	Environmental Policy and Green Development Strategy in Mongolia	Lecture
	2	Reforms and challenges of the policy and legal environment of MU CSO - traditional ideas of MU CSO, concept and implementation of Green Development – case studies	Seminar
11	2	International Environmental Legislation and Development	Lecture
	2	Case study of environmentally friendly or sustainable development	Seminar
12	2	Environmental policy and regulatory mechanism in Russia	Lecture
	2	Comparison of the Space and Marine Legal Issues - Blue Economy- International Space	Seminar
13	2	Environmental Policy and Regulatory Mechanism in China	Lecture
	2	Comparison of Sustainable and Green Development Policies in neighbors (Russia and China)	
14	2	Urbanization in world and metropolitan cities	

	2	Comparative Case studies of Green City standards	Seminar
15	2	Consequences of the chemical and biological experiments and armaments policies of the Great Powers: Case of the nuclear tests and consequences	Lecture
	2	Case study: Energy competition for the Science and Technology Development Strategy	Seminar
16	2	Conclusion lecture	Lecture
	2	Exam	Seminar
Lecture 32 Seminar 32			

Course assignments/tests

Students will design the individual research project that addresses to the sustainable development challenges, which are involving in the green development strategy. The focus of the research project can be any topic that will promote sustainable practices.

Literature

Compulsory:

1. Sarkar, Runa, and Anup Sinha. Economics of Sustainable Development, Business Expert Press, 2016. ProQuest Ebook Central <https://ebookcentral.proquest.com/lib/hselibrary-ebooks/detail.action?docID=5184983> Англи хэлээр.
2. The Handbook of Global Climate and Environmental Policy edited by Robert Falkner., 2013. Wiley-Blackwell 538 p
- 3.
- 4.

Recommended:

1. Монгол Улсын Их Хурал. 2016 оны 19-р тогтоол. Монгол Улсын Тогтвортой Хөгжлийн Үзэл Баримтлал -2030.
2. Монгол улсын ҮАБ-ын үзэл баримтлал, 2010 он
3. Монгол улсын Гадаад бодлогын үзэл баримтлал, 2011 он
4. МУ-ын Ногоон эдийн засгийн үндэсний стратеги, 2010
5. Бодлогын баримт бичиг: Алсын хараа – 2050, 2020 он