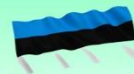




Co-funded by the  
Erasmus+ Programme  
of the European Union



**Urban Resilience and Adaptation for India and Mongolia:  
curricula, capacity, ICT and stakeholder collaboration to support green & blue infrastructure and nature-based solutions  
619050-EPP-1-2020-1-DE-EPPKA2-CBHE-JP**

# NATURE CONSERVATION AND SPECIAL PROTECTED AREAS MANAGEMENT

## Introduction to the course ENVI802



**Associate Professor Namsrai Oyunchimeg  
National University of Mongolia**

<https://online.num.edu.mn/courses/course-v1:NUM+ENVI402+2022/course/>



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- Teaching and learning method - How to attend the E-course?



Course name: Nature conservation and special protected area management  
 Course index: ENVI802  
 Number of credits: 3 ECTS/6 MCTS  
 Period: Fall/Spring semester



Host institution	National University of Mongolia, School of Engineering and Applied Sciences
Lecturer	Associate professor Namsrai Oyunchimeg
Level	Ph.D. course
Course type	Major compulsory course
Course duration	12 weeks
New/Revised	Revised course. The previous course was developed in 2015
E-course link	<a href="https://online.num.edu.mn/dashboard">https://online.num.edu.mn/dashboard</a>
Language	Available in Mongolian language only

### Target student audiences

Open for life-long learners who are interesting in nature conservation.

- ~ PhD students who are majoring in environmental science, nature conservation and protected areas management.
- ~ Life-long learners who are interested in nature conservation and special protected area's management.

### Summary

In addition to introducing the basic concepts of nature conservation and the main tools of nature conservation, this course will explore in depth the management of special protected areas, a classic method of nature conservation. It consists of 12 video lecturers, 12 video seminars, and supplementary study materials that use in the seminar classes. The following contents are included in the lecture: the basic concepts of nature conservation, the relationship between humankind and nature, ecological crises and their causes, human needs and their ecological impact, the theoretical and methodological basis of nature conservation, natural resources and their use, Special protected area and its management issues, urbanization and waste management, sustainable development and adaptation to the climate change. During the seminar, students will get to know the concepts learned in the lecture more deeply, while studying the reality of the topic in the Mongolian case, they will conduct practical exercises, evaluate the management effectiveness of special protected areas and develop a management plan using the tools of the European Union (EU).



## Aims and objectives

This course examines traditional and modern methods of environmental protection, human-caused environmental problems, and human actions for conservation/rehabilitation, including science, politics, business, the role of people, and sustainable development. It is important to provide students with a broad understanding of development issues and to study environmental issues facing humanity, such as global climate change, from the perspective of ecological science and nature conservation.

### The authentic tasks

- Read the given materials and answer the key questions to reinforce their understanding of the topic covered in the lectures.
- Install MIRADI software and download the management effectiveness tracking tool (METT) for the seminar classes
- Independently complete the tasks of the seminar and learn to use the methods and tools of nature conservation and nature conservation planning.

### Prerequisites

- Pre-required courses:
  1. Environmental science ENVI200
  2. Sustainable development and green development policy ENVI312
- Parallel courses (suggestion):
  1. Strategy and policy of green development ENVI618





### General learning outcomes:

By the end of the course, successful students will:

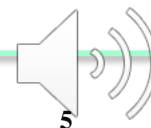
Knowledge	<ul style="list-style-type: none"> <li>~ basic laws in the “man-nature” system</li> <li>~ the meaning of modern problems of interaction between society and nature</li> <li>~ classification of natural resources, features of their use, consequences of overspending, and irrational use of natural resources</li> <li>~ finding and labeling data</li> <li>~ selecting appropriate resources</li> </ul>
Comprehensive	<ul style="list-style-type: none"> <li>~ working in team</li> <li>~ making analysis</li> <li>~ practical learning</li> <li>~ self-learning</li> <li>~ identifying the problems</li> <li>~ summarizing and stating the main ideas</li> </ul>
Application	<ul style="list-style-type: none"> <li>~ solving the problems</li> <li>~ developing a management plan for nature conservation</li> <li>~ evaluating threats to biodiversity</li> <li>~ practical application</li> <li>~ interviewing people</li> </ul>
Analysis	<ul style="list-style-type: none"> <li>~ analyzing human, market and scientific positions and rationales in nature conservation practices and environmental management</li> <li>~ open-source data analysis</li> <li>~ test for the accuracy of information</li> </ul>
Synthesis	<ul style="list-style-type: none"> <li>~ critically approach the current practice and basic theoretical concepts of nature conservation</li> <li>~ compiling information together in a different way by proposing alternative solutions</li> </ul>

### Grading

The student's performance will be based on the following:

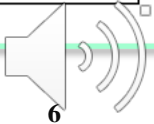
Assessment	Progress assessment (40%):
	~ Attendance and academic activity (20%)
	~ Progress test (20%)
	Final assessment (30%):
~ Homework and teamwork report (30%): The students will be divided into groups of 4-5 students and choose 1 topic from the given topics and complete the group project report according to the specific requirements of each topic.	
Final examination (30%)	

Evaluation EU system	A (8,5 – 10)	Evaluation MN system	95-100	A	4.0
	B (7,0 – 8,4)		90-94	A-	3.6
	C (5,5 - 6,9)		85-89	B	3.1
	D (4,0 – 5,4)		80-84	B-	2.7
			75-79	C	2.3
			70-74	C-	1.9
	65-69	D	1.4		
	60-64	D-	1.0		
	0-59	F	0.0		



### Course schedule

Week	In-class hours	Topic	Type
1	2	~ Introduction: Basic concepts and goals of nature conservation	Lecture
	2	~ Nature conservation tradition of Mongolians	Seminar
2	2	~ Mankind and the environment they create. Human-nature relationship. Ecological crises in human history	Lecture
	2	~ Man-made environment. Human needs and their types	Seminar
3	2	~ The biosphere is a human habitat. The theoretical and methodological basis of nature conservation	Lecture
	2	~ Ecosystem services	
4	2	~ Natural resources are an important object of natural resources.	
	2	~ Appropriate use of natural resources	
5	2	~ Basic tools and incentives for nature con	
	2		
6	2	~ Impact of economic activities on the environment. Atmosphere, air quality and its protection	Lecture
	2		Seminar
7	2	~ Use of water and land resources and their protection.	Lecture
	2		Seminar
8	2	~ Use of mineral resources and their protection	Lecture
	2		Seminar
9	2	~ Use and protection of forest and biological resources. Special protected areas as an effective way for nature protection	Lecture
	2	~ Network of special protected areas of Mongolia	Seminar
10	2	~ Special protected area management	Lecture
	2		Seminar
11	2	~ Urbanization and infrastructure. Waste management	Lecture
	2		Seminar
12	2	~ Summary: Sustainable development and nature conservation. Adaptation to climate change	Lecture
	2		Seminar



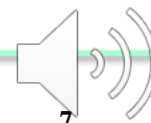
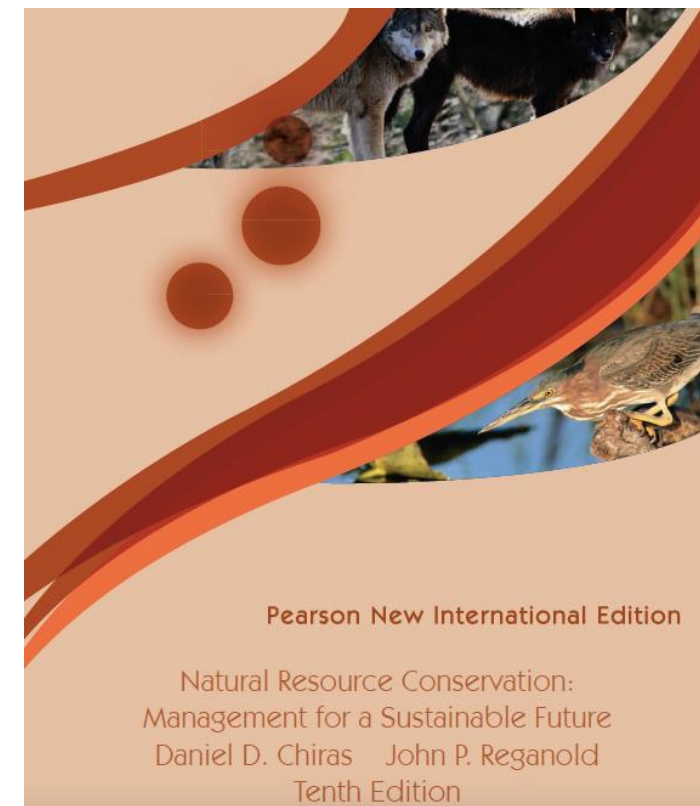
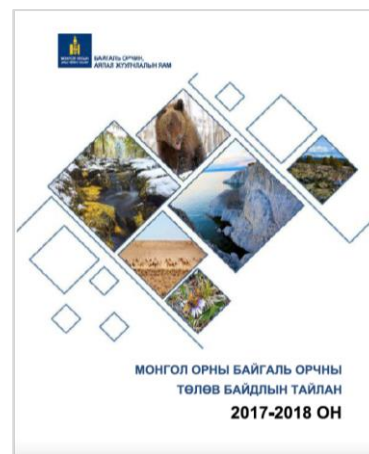
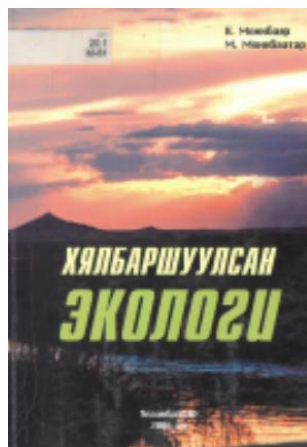
## Literature

### Compulsory:

1. Daniel. D and et al, (2014) “Natural Resource Conservation: Management for a Sustainable Future”, 10<sup>th</sup> edition, Pearson New International, USA, pages 663, ISBN 13: 978-1-292-04098-1, in Mongolian
2. Titova V. I and Dabakhova E. V, (2003) ““Environmental conservation”, Textbook, Publishing House of the Volga-Vyatka Academy of Civil Service, Nijny Novgorod,” ISBN: 5-85152-344-1, pages 213, ISBN 5-85152-344-1, in Russian.

### Recommended:

1. H. Monkhubayar and M. Monkhubaatar, (2006) "Simplified Ecology", Admon Press, pages 154, ISBN:9789992907657 0.00, in Mongolian
2. Ministry of Environment and Tourism of Mongolia, (2019) “Report on the state of the environment in Mongolia”, editors Enkhbat. A, Tsogtsaikhan. P and Nyamdavaa. G, Ulaanbaatar, pages 186, in Mongolian

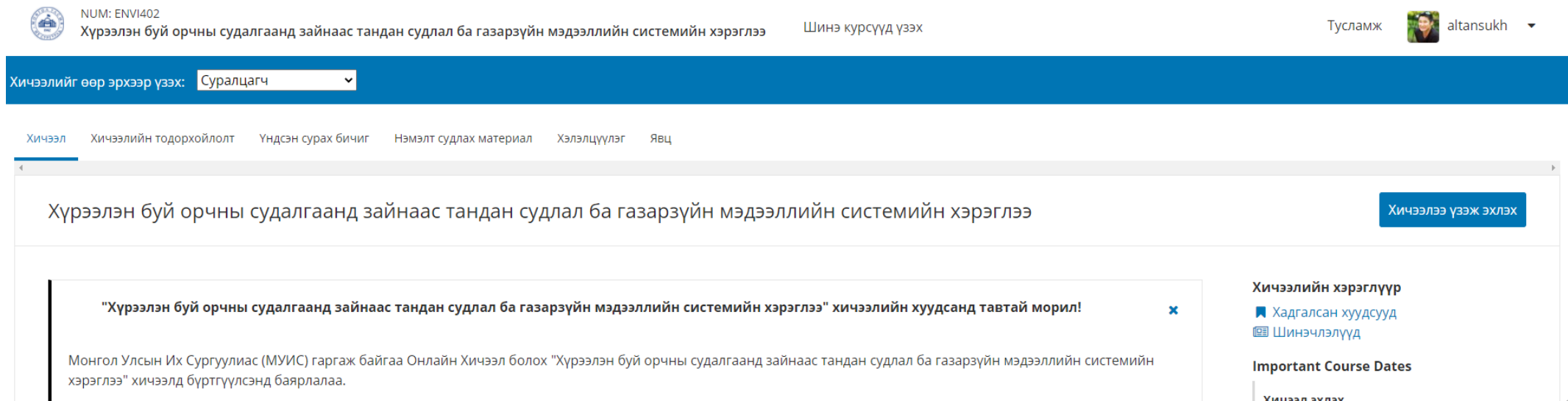




As the course will be conducted online, students are not required to come to the university for both lectures and seminars. Most of the interactive and self-reflective methods of teaching-learning will be applied to the course, where possible, avoid standing lectures and presentations. All video lectures, and seminar works were prepared and embedded in OpenEDX based online learning platform of the university.


### How to attend an E-course:

- <https://online.num.edu.mn/>
- Select a course. ENVI802
- Register the course. Enroll in ENVI802
- The follow the steps to Register the OpenEDX system.
- After changing the password, enter the e-learning system.
- Enter the course



NUM: ENVI402  
Хүрээлэн буй орчны судалгаанд зайнаас тандан судлал ба газарзүйн мэдээллийн системийн хэрэглээ

Шинэ курсүүд үзэх

Тусламж  altansukh

Хичээлийг өөр эрхээр үзэх:

Хичээл | Хичээлийн тодорхойлолт | Үндсэн сурах бичиг | Нэмэлт судлах материал | Хэлэлцүүлэг | Явц

Хүрээлэн буй орчны судалгаанд зайнаас тандан судлал ба газарзүйн мэдээллийн системийн хэрэглээ Хичээлээ үзэж эхлэх

"Хүрээлэн буй орчны судалгаанд зайнаас тандан судлал ба газарзүйн мэдээллийн системийн хэрэглээ" хичээлийн хуудсанд тавтай морил!

Монгол Улсын Их Сургуулиас (МУИС) гаргаж байгаа Онлайн Хичээл болох "Хүрээлэн буй орчны судалгаанд зайнаас тандан судлал ба газарзүйн мэдээллийн системийн хэрэглээ" хичээлд бүртгүүлсэнд баярлалаа.

Хичээлийн хэрэглүүр  
■ Хадгалсан хуудсууд  
■ Шинэчлэлүүд

Important Course Dates  
■ Хичээл эхлэх

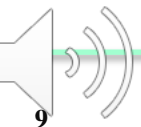




## E-course component:

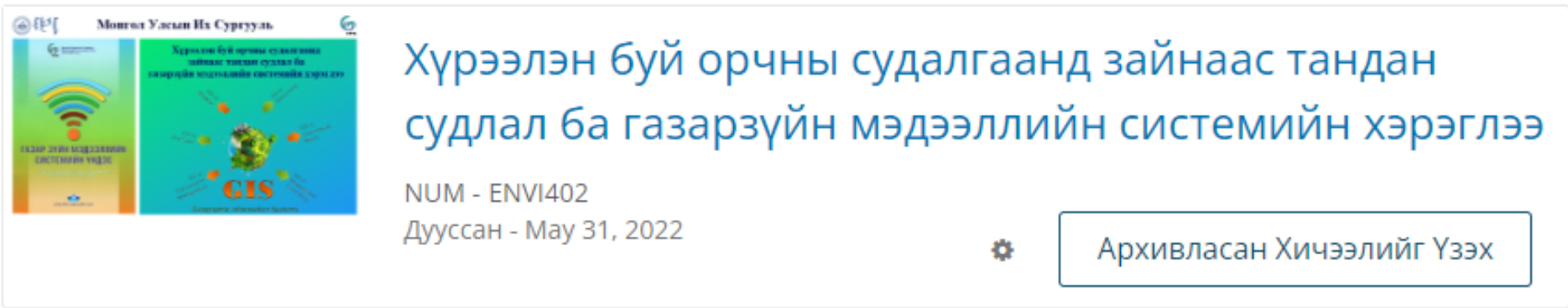
1. About course
2. Lecture and seminar video – key questions
3. Syllabus
4. Core study book
5. Additional study materials
6. Discussion
7. Assignment and result

As it is an online course, students can attend the class anytime and anywhere during the semester.



# Online course

<https://online.num.edu.mn/courses/course-v1:NUM+ENVI402+2022/course/>



Хүрээлэн буй орчны судалгаанд зайнаас тандан судлал ба газарзүйн мэдээллийн системийн хэрэглээ

NUM - ENVI402  
Дууссан - May 31, 2022

Архивласан Хичээлийг Үзэх

Sign-in the e-course using e-mail.

Sign In

Цахим шуудан  
\*\*\*\*@stud.num.edu.mn

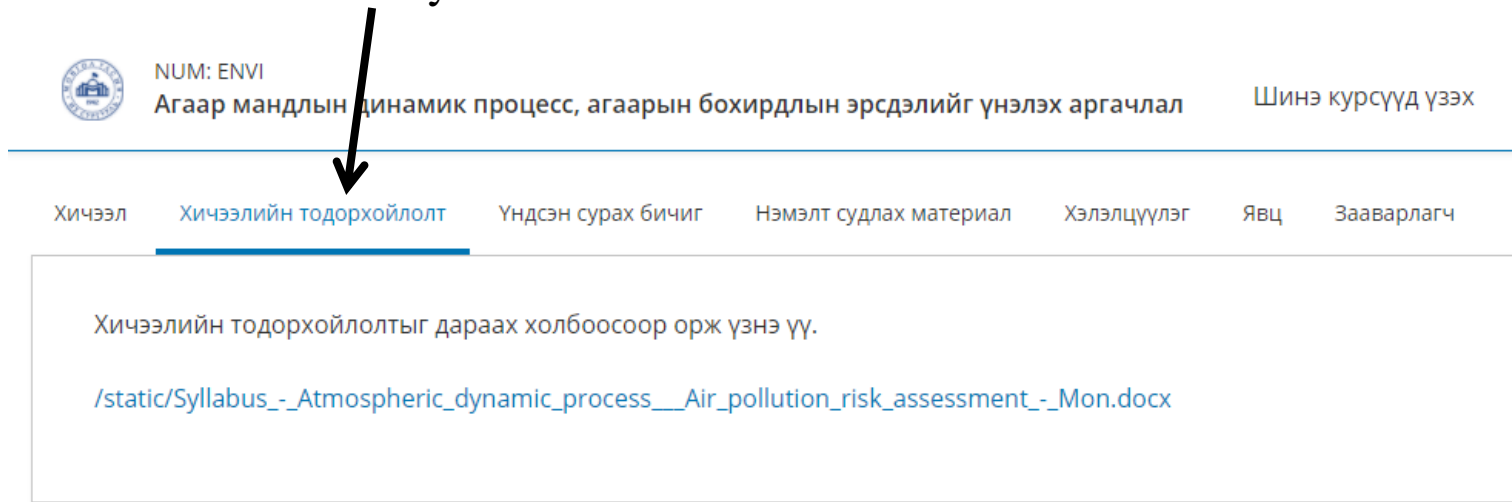
'МУИС-ийн цахим хичээл' -д МУИС-ийн албан ёсны цахим шуудан ашиглана.

Нууц үг  
Forgot password?

Remember me

Sign in

See and download syllabus



NUM: ENVI  
Агаар мандлын динамик процесс, агаарын бохирдлын эрсдэлийг үнэлэх аргачлал

Хичээл | **Хичээлийн тодорхойлолт** | Үндсэн сурах бичиг | Нэмэлт судлах материал | Хэлэлцүүлэг | Явц | Зааварлагч

Хичээлийн тодорхойлолтыг дараах холбоосоор орж үзнэ үү.  
[/static/Syllabus\\_-\\_Atmospheric\\_dynamic\\_process\\_\\_\\_Air\\_pollution\\_risk\\_assessment\\_-\\_Mon.docx](/static/Syllabus_-_Atmospheric_dynamic_process___Air_pollution_risk_assessment_-_Mon.docx)

List of all lectures look like this.

To start to see lecture, press here

NUM: ENVI  
Агаар мандлын динамик процесс, агаарын бохирдлын эрсдэлийг үнэлэх аргачлал

Хичээлийг өөр эрхээр үзэх: Суралцагч

Хичээл | Хичээлийн тодорхойлолт | Үндсэн сурах бичиг | Нэмэлт судлах материал | Хэлэлцүүлэг | Явц

Агаар мандлын динамик процесс, агаарын бохирдлын эрсдэлийг үнэлэх аргачлал

Хичээлээ үзэж эхлэх

Expand All

**Хичээлийн хэрэглүүр**

- Хадгалсан хуудсууд
- Шинэчлэлүүд

**Important Course Dates**

Today is Jan 8, 2021 17:53 +08

**Хичээл дуусах**  
in 1 жил - Dec 31, 2021

Энэ огнооны дараа хичээлийн агуулга архивлагдана.

- Хичээл 1: Агаар мандлын динамик процессын тухай
- Хичээл 2: Наран дээрх урвал, нарны цацраг
- Хичээл 3: Дэлхийн гадарга дээрх агаарын даралтын хуваарилалт
- Хичээл 4: Даралтын хэвтээ градиант, салхи
- Хичээл 5: Агаарын масс
- Хичээл 6: Агаарын температур
- Хичээл 7: Агаарын чийг, чийгшлийн хэмжигдэхүүнүүд
- Хичээл 8: Хур тунадас
- Хичээл 9: Цаг агаарыг урьдчилан тооцоолох математик статистикийн арга
- Хичээл 10: Агаарын бохирдлын цаг агаарын нөхцөлийг прогнолох
- Хичээл 11: Хотын агаарын бохирдлын дэвсгэр нөхцөлийг прогнолох

Илтгэл  
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Лекц 1: ГМС-ийн удиртгал

ENVI402 Лекц 1: ГМС-ийн удиртгал

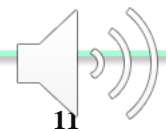
Энэ Ниво үзэгдэл

Энэ талын зураг нь 1997 оны 12-р сарын Энэ Ниво үзэгдлийг, баруун талын зураг нь 1998 оны 12-р сарын Ли Ниво үзэгдлийг дүрсэлж, Далайн усны гадаргын өндөрлөг температурыг өснөр, салхины дундаж хурцаар дүрслэн үзүүлсэн. Доод талын хоёр зураг нь аномаль (хэвийн байдлаас хэвхэтэ) хэлбэрийг илтгэнэ. Эхний доод бүлэг Шинэ Гвинея орныг дүрсэлсэн.

Дунд зургинд Далайн усны гадаргын абсолют дундаж температур [°C] ба салхины хүч [м/сек]

Доод зургинд Дээрх хоёр үзүүлэлтүүдийн аномаль хэлбэр буюу хэвийн байдлаас гялсан байдал

Эх сурвалж: Далайн болон агаар мандалын үндэсний захирал, Номхон далайн хэрэгтэн буй орны лаборатори, Тropic орчмын агаар мандал, далайн судалгааны төсөл



All lecture and laboratory videos look like this.

Илтгэл

[Bookmark this page](#)

### Лаборатори 1: Газарзүйн солбицол, байр зүйн зураг

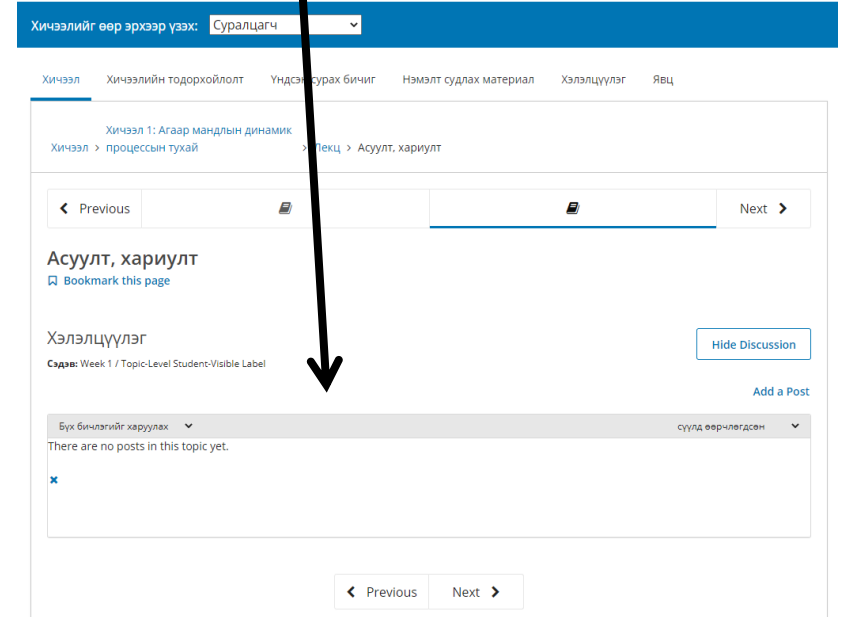


ENVI402 Лаб 1 Байрзүйн зураг

1:100 000 масштабын байр зүйн зургийн планшетын байрлал

© Professor O.Altansukh, School of Engineering and Applied Sciences, National University @МУИС, бүх эрхийг хуулиар хамгаалсан

Students post question, if they have



Хичээлийг өөр эрхээр үзэх:

Хичээл | Хичээлийн тодорхойлолт | Үндсэн зурах бичиг | Нэмэлт судлах материал | Хэлэлцүүлэг | Явц

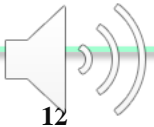
Хичээл 1: Агаар мандлын динамик  
Хичээл > процессын тухай > Төгц > Асуулт, хариулт

Асуулт, хариулт  
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Хэлэлцүүлэг  
Сэдэв: Week 1 / Topic-Level Student-Visible Label

Бүх бичлэгийг харуулах | сүүлд өөрчлөгдсөн

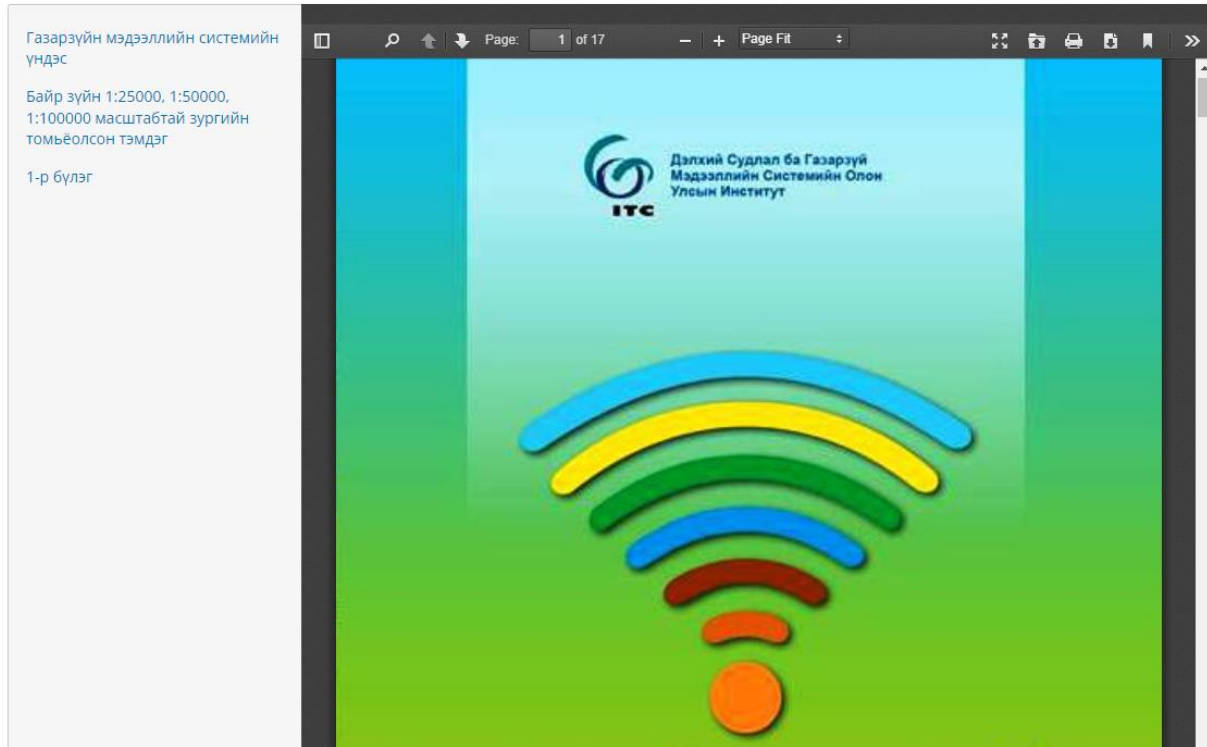
There are no posts in this topic yet.





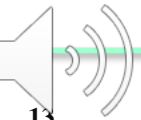
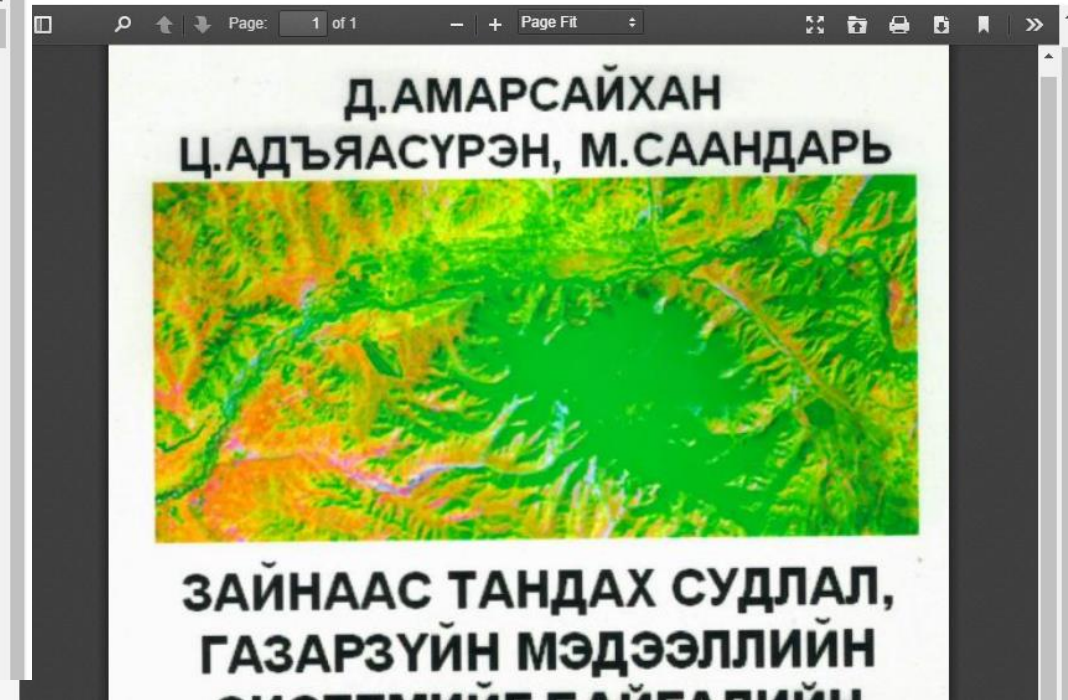
## Core study book

Хичээл Хичээлийн тодорхойлолт Үндсэн сурах бичиг Нэмэлт судлах материал Лаборатори Хэлэлцүүлэг Явц Зааварлагч



## Additional study materials

Үндсэн сурах бичиг Нэмэлт судлах материал Лаборатори Хэлэлцүүлэг Явц Зааварлагч



## Discussion section

Хичээл Хичээлийн тодорхойлолт Үндсэн сурах бичиг Нэмэлт судлах материал **Хэлэлцүүлэг** Явц Зааварлагч

All Topics Бичлэг нэмэх Search all posts Search

Сэдвүүдийг Шүүх  
сэдвүүдийг шүүх

Бүх хэлэлцүүлэг

★ Миний дагаж байгаа бичлэгүүд

Week 1

Topic-Level Student-Visible Label (2)

Topic-Level Student-Visible Label (9)

Topic-Level Student-Visible Label (3)

Topic-Level Student-

Discussion Home  
Агаар мандлын динамик процесс, агаарын бохирдлын эрсдэлийг үнэлэх аргачлал

How to use 'МУИС-ийн цахим хичээл' discussions

**Find discussions**  
Use the All Topics menu to find specific topics. Search all posts Filter and sort topics

**Engage with posts**  
Vote for good posts and responses Report abuse, topics, and responses Follow or unfollow posts

**Receive updates**  
Check this box to receive an email digest once a day notifying you about new, unread activity from posts you are following.

## Assignment and result

NUM: ENVI  
Агаар мандлын динамик процесс, агаарын бохирдлын эрсдэлийг үнэлэх аргачлал Шинэ курсууд үзэх

Тусламж altansukh

Хичээлийг өөр эрхээр үзэх: Суралцагч

Хичээл Хичээлийн тодорхойлолт Үндсэн сурах бичиг Нэмэлт судлах материал Хэлэлцүүлэг **Явц**

Course Progress for Student 'altansukh' (altansukh@num.edu.mn) **СТУДИД ДҮНГ ХАРАХ**

Unit	Progress (%)
IX 01	0%
IX 02	0%
IX 03	0%
IX 04	0%
IX 05	0%
IX 06	0%
IX 07	0%
IX 08	0%
IX 09	0%
IX 10	0%
IX 11	0%
IX 12	0%
IX 13	0%
IX 14	0%
IX 15	0%
IX 16	0%
IX 01	0%
C 02	0%
C 03	0%
C 04	0%
C 05	0%
C 06	0%
C 07	0%
C 08	0%
C 09	0%
C 10	0%
C 11	0%
C 12	0%
C 13	0%
C 14	0%
C 15	0%
С.Дүнлэг	0%
УШ	0%
Total	0%

