

MAL WATCH

LÎUA

GfT



Co-funded by the 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

ECOLOGY OF URBAN WOODY PLANTS



Introduction to the course ARCH708

Doctor Otgonsuren BURENJARGAL School of Agroecology, Mongolian University of Life Sciences https://online.num.edu.mn/courses



CONTENT

- Summary and target audiences
- Objective and tasks
- General learning outcomes
- Grading and assessment
- Course schedule Lecture
- Course schedule Laboratory
- Literature
- Teaching and learning method How to attend an E-course?



Urban

acity, ICT and

8

er collaboration to support gree 19050-EPP-1-2020-1-DE-EPPK/



Course name:	Ecology of urban woody plants
Number of credits:	6 ECTS/3 MCTS
Period:	Fall/Spring semester

Host institution	Mongolian University of Life Sciences, School of Agroecology
Lecturer	Burenjargal Otgonsuren, Odongerel Sangidorj
Level	MSc course
Course type	Elective course
Course duration	8 weeks
New/Revised	A newly developed
E-course link	

Target student audiences

- ✓ Master students majoring in landscape architecture
- Open for life-long learners who are interesting in ecology of urban woody plants and its application at the fundamental level.

Co-funded by th nus+ Programm European Unio

city, ICT a

n to suppo 020-1-DE- 8



The Master course covers urban woody plants and air pollution and their relation, carbon sequestration by urban trees, soil and impact on soil quality, woody plants and water relation, water regulation service, urban woody plants and their relation on light, benefits of urban green space on improving the urban climate, heat island and the role of urban greening, role of urban forests in residents health, value and assessment of urban forests.

3

Aims and objectives

The course aims to provide knowledge about woody plant ecology in urban area and urban green zone forest ecology particular reference to the responses of woody plants to urban environmental factors and to woody plant life strategies and methods to identify and analyze affecting factors.

Prerequisites

Required courses (or equivalents): ECO238, Landscape architecture ecology **The authentic tasks** Two-hour lecture is followed by a practical session.

6



b-funded by ti s+ Programn uropean Unio

ICT al



us



K	ure-based solution
	dia: tructure and nat
	ndia and Mongo en & blue infras (A2-CBHE-JP
Ł	Jrban Resilience and Adaptation for India and Mongolia: keholder collaboration to support green & blue infrastruc 619050-EPP-1-2020-1-DE-EPPKA2-CBHE-JP
	rban Resilience an eholder collaborat 619050-EPP-1
Co-funded by the Erasmus+ Programme of the European Union	Urban Resilience and Adaptation for India and Mongolia: urricula, capacity, ICT and stakeholder collaboration to support green & blue infrastructure and nature-based solution 619050-EPP-1-2020-1-DE-EPPKA2-CBHE-JP
$\langle \rangle$	urricula,

General lear	ning outcomes:
--------------	----------------

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

Knowledge	The course provides the students with the knowledge of: Knowledge of urban woody plant species and their environment Knowledge of the factors influencing the growth of urban woody plants Knowledge of urban woody plant ecosystem services
Application	employ hypotheses based on scholarly reading, formulate and test hypotheses through experimental work in urban woody plant ecology
Analysis	develop critical thinking, analysis, and writing skills as they apply to urban woody plant ecology
Synthesis	describe literature through discussion with classmates; explain topics in through oral presentation
Competences	The course will help students acquire competences, such as: Identify urban environmental factors affecting urban woody plant growth Ecological analysis of urban woody plant environment Defining and assessing urban forest effects and values

The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein

© URGENT

8

6

5





performance wil	l be based on th	ne followin	g:	
1 Ouizzes (30º			•	
There will be (x2) each. Qui Written feedbac 2. Discussion (There will be presented throu topics discusse quality and con course. 3. Final Exam (A hour exam in	five quizzes in izzes will be s ck will be provi (40%) an oral discu- ugh a power p ed during the ntent understan (30%) n the end of se	hort-answe ided in the ssion of a point prese course. A nding, know	er writ follow scien ntation ssessm wledge	ten quizzes of 20 ing practical. tific paper choses , followed by few ent criteria are b of the main cond
		95-100 90-94 85-89 80-84 75-79	A A- B B- C	
	There will be (x2) each. Qui Written feedbac 2. Discussion (There will be presented throu topics discusse quality and con course. 3. Final Exam (A hour exam in lectures and pra	 (x2) each. Quizzes will be s Written feedback will be provided. 2. Discussion (40%) There will be an oral discupresented through a power proprise discussed during the quality and content understance (30%) A hour exam in the end of selectures and practicals. A (8,5 – 10) B (7,0 – 8,4) Evaluation 	There will be five quizzes in practical (x2) each. Quizzes will be short-answer Written feedback will be provided in the 2. Discussion (40%)There will be an oral discussion of a presented through a power point prese topics discussed during the course. As quality and content understanding, know course.3. Final Exam (30%) A hour exam in the end of semester exa lectures and practicals.95-100 90-94 85-89 80-84 75-79	There will be five quizzes in practical session(x2) each. Quizzes will be short-answer writWritten feedback will be provided in the follow2. Discussion (40%)There will be an oral discussion of a scienpresented through a power point presentationtopics discussed during the course. Assessmquality and content understanding, knowledgecourse.3. Final Exam (30%)A hour exam in the end of semester exam perilectures and practicals.95-100A (8,5 - 10)B (7,0 - 8,4)Evaluation80-8475-79C

Grading

vorth 5% (x2) and 10% 20 minutes in duration.

en by the student and ew questions about the based on presentation ncepts given during the

on material from both

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

© URGENT

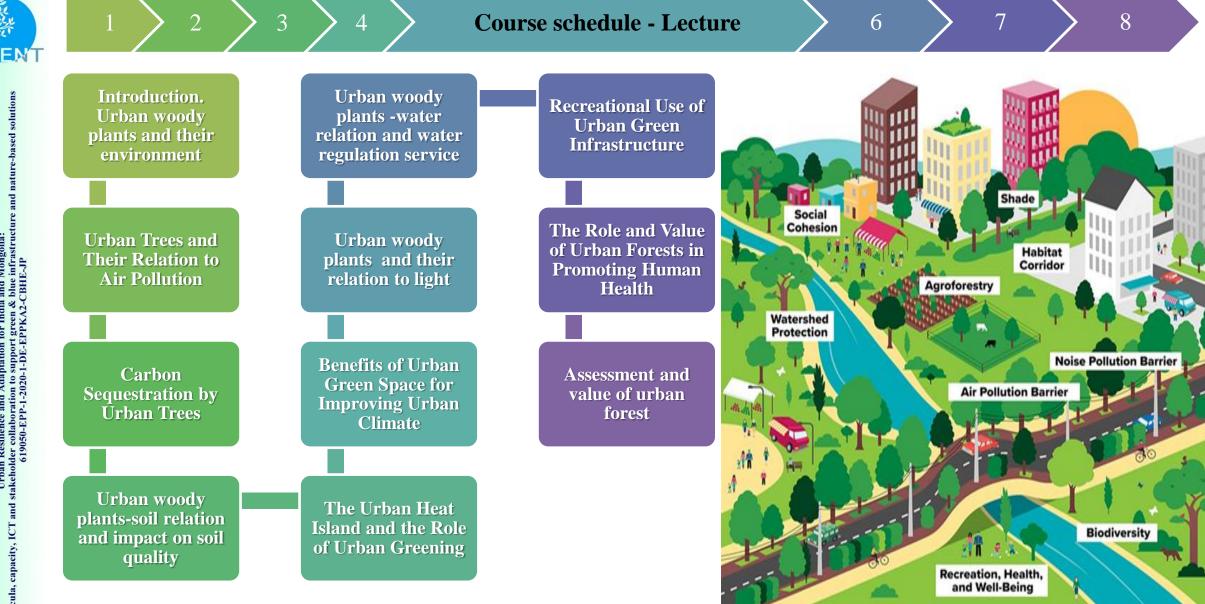
The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein

8

6

5





© URGENT





Urban woody plants-**Urban woody plants** soil relation and and their relation to impact on soil quality

The Role and Value of Urban Forests in **Promoting Human** Health

Carbon

Sequestration by

Urban Trees

3

4

2

Assessment and value of urban forest



light

© URGENT

The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein



Literature

Compulsory:

- David Pearlmutter Carlo et al. "The Urban Forest" 2017
- 2. Margaret M et al. "Ecology, Planning, and Management of Urban Forests" 2008

Recommended:

3. Journal of Urban greening and Urban forestry

https://www.sciencedirect.com/journal/urban-forestry-and-urban-greening



8



International Perspectives

Editors





5 6 7 Teaching and learning method - How to attend an E-course?

The course will conduct online form that means students no longer needed to come to the university for the lecture class. For the laboratory work, students can come to the class, if they need. GIS laboratory will be available during the course. 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 laboratory works were prepared and embedded in OpenEDX based online learning platform of the university.

How to attend an E-course:

- <u>https://online.num.edu.mn/</u>
- Select a course. ARCH708
- ➤ Register the course. Enroll in ARCH708
- > The follow the steps to Register the OpenEDX system.
- After changing the password, enter the e-learning system.
- \succ Enter the course

		Бүртгүүлэх заав	ар
	Sign In	ад "forget password?" холбоос дээр дарна уу.	
	וואזיבן אוואריבם NUM: ENVI402 Хүрээлэн буй орчны судалгаанд зайнаас тандан судлал ба газарзүйн мэдээллийн системийн хэрэ	глээ Шинэ курсүүд үзэх	Тусламж 💓 altansukh 👻
Хичээлиі	iг өөр эрхээр үзэх: Суралцагч 👻		
Хичээл	Хичээлийн тодорхойлолт Үндсэн сурах бичиг Нэмэлт судлах материал Хэлэлцүүлэг Явц		
Хү	рээлэн буй орчны судалгаанд зайнаас тандан судлал ба газарзүйн мэ	эдээллийн системийн хэрэглээ	Хичээлээ үзэж эхлэх
	"Хүрээлэн буй орчны судалгаанд зайнаас тандан судлал ба газарзүйн мэдээллийн системи	чйн хэрэглээ" хичээлийн хуудсанд тавтай морил!	Хичээлийн хэрэглүүр Хадгалсан хуудсууд Шинэчлэлүүд
	Монгол Улсын Их Сургуулиас (МУИС) гаргаж байгаа Онлайн Хичээл болох "Хүрээлэн буй орчны судалга хэрэглээ" хичээлд бүртгүүлсэнд баярлалаа.	анд зайнаас тандан судлал ба газарзүйн мэдээллийн системийн	Important Course Dates

© URGENT



E-course component:

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

Cause of the e-course, students can attend the class anytime and anywhere in the term.





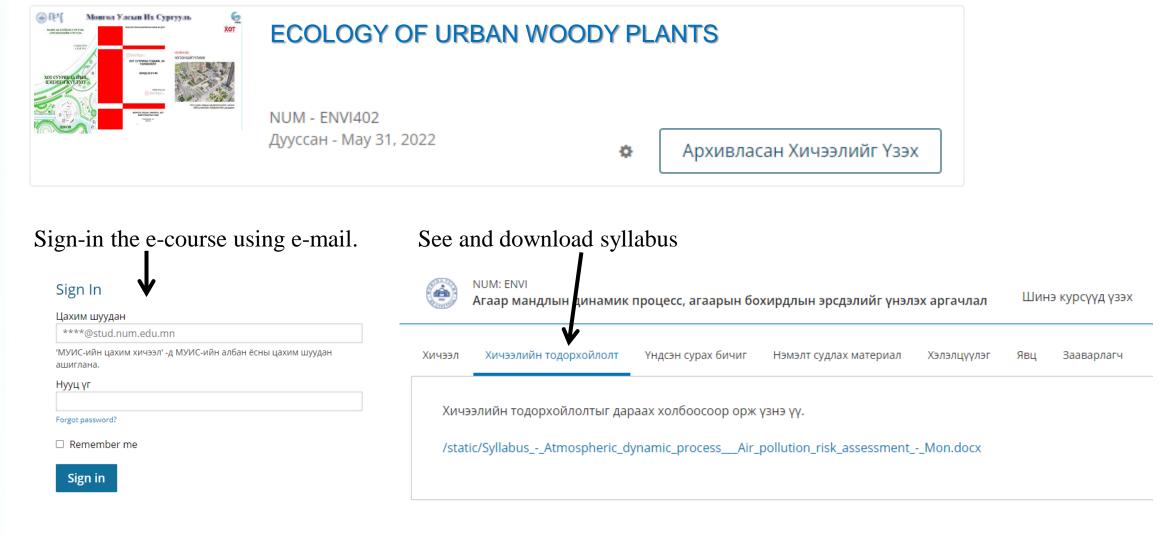
ion to support -2020-1-DE-E

619050-

icity, ICT

Online course

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



any use which may be made of the information contained therein

© URGENT



c BHE-

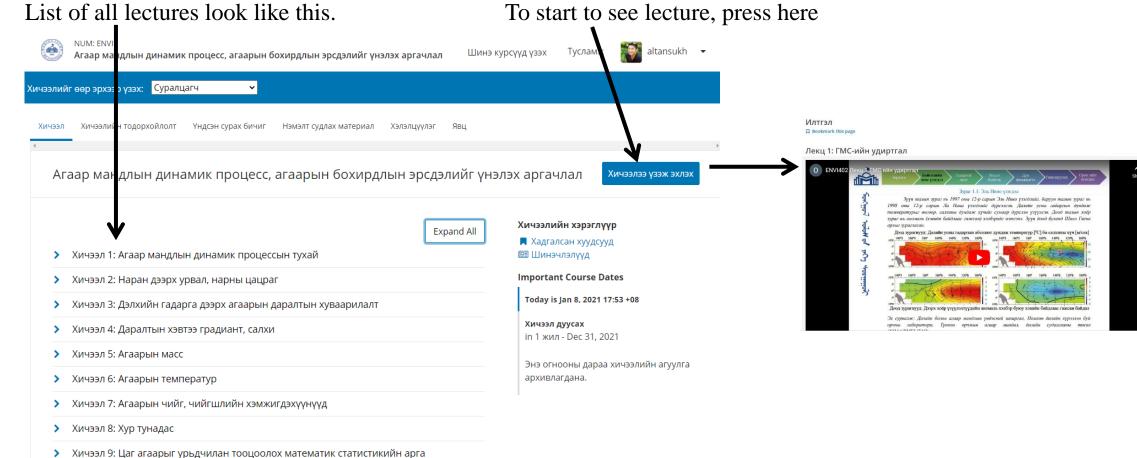
der collaboration to support gree 619050-EPP-1-2020-1-DE-EPPK

stake

city, ICT and

Co-funded by the mus+ Programme e European Unior

Ъ



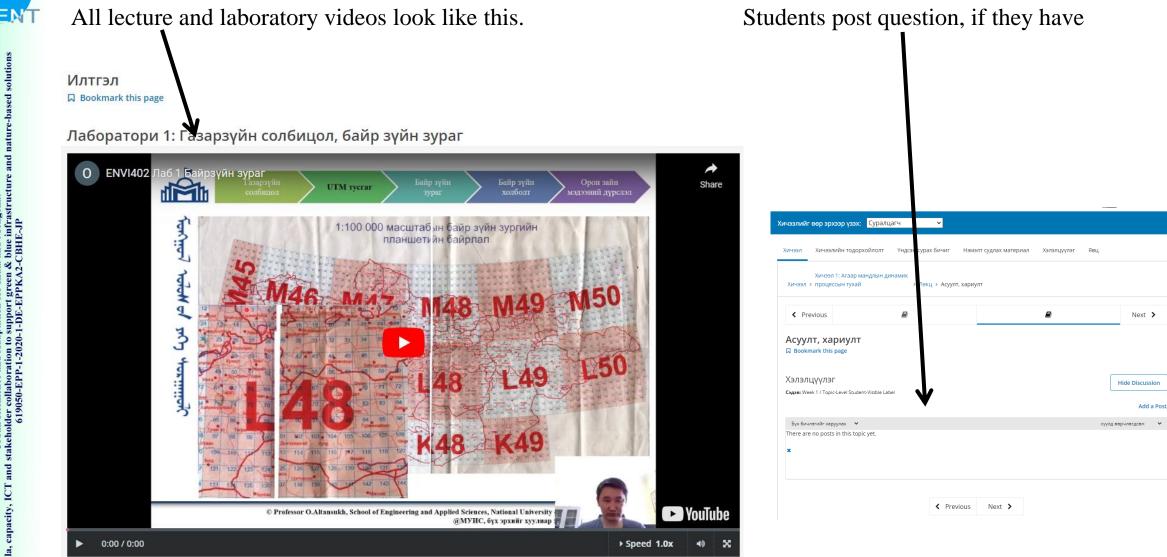
> Хичээл 10: Агаарын бохирдлын цаг агаарын нөхцөлийг прогнозлох

> Хичээл 11: Хотын агаарын бохирдлын дэвсгэр нөхцөлийг прогнозлох



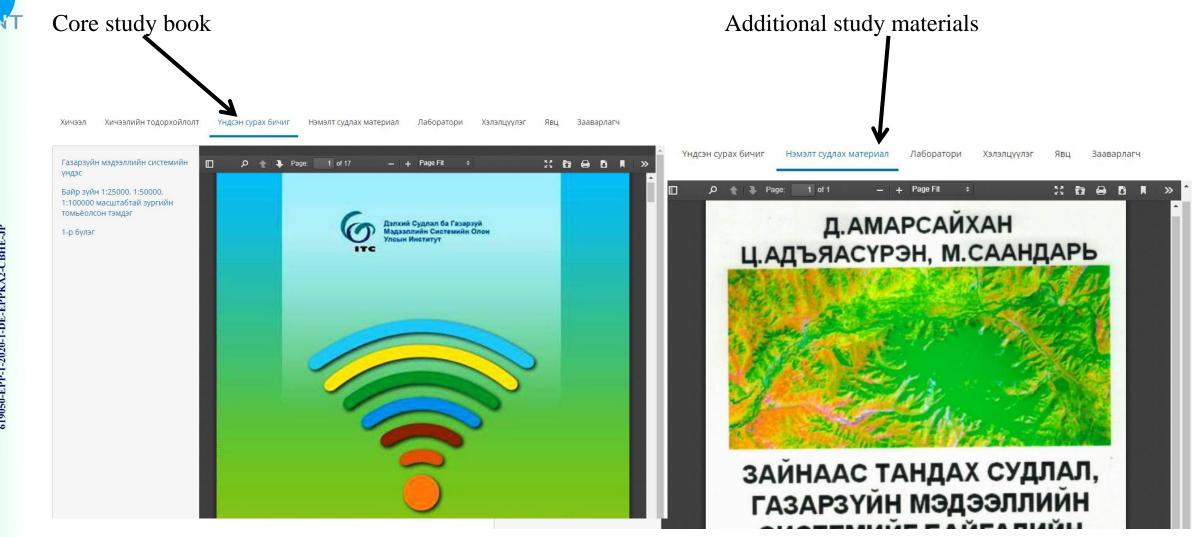
Co-funded by t mus+ Programr European Uni

щP



© URGENT





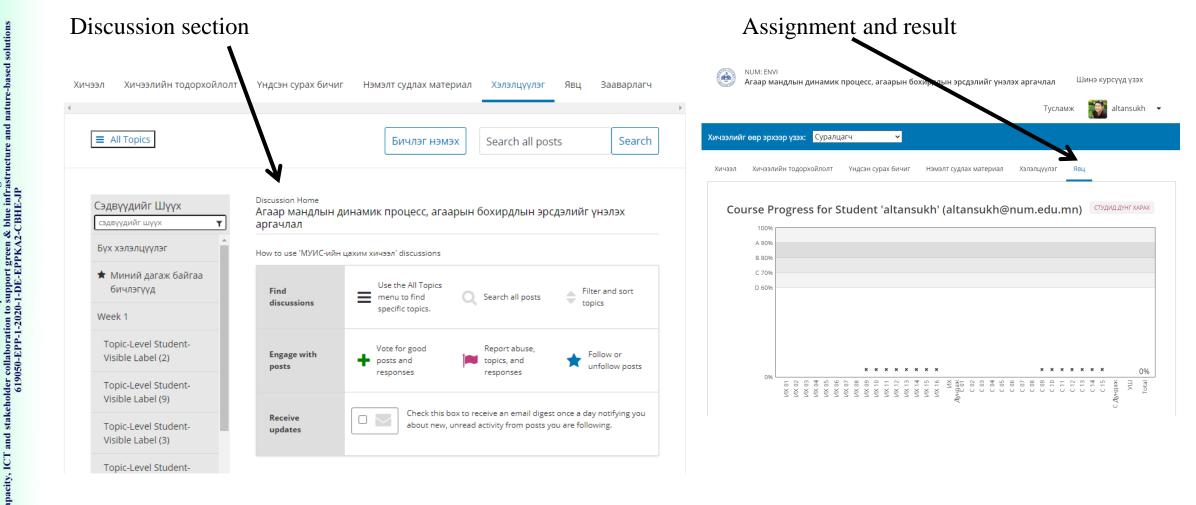
LUL



M pu

Urban stakehol

city, ICT and





Ъ

Co-funded by the mus+ Programme e European Unior

© URGENT







THANKS FOR YOU ATTENTION



© URGENT