



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

SYLLABUS:

URBAN GREEN SPACE SYSTEM PLANNING

Course name: **Urban green space system planning**
Number of credits: 4.8 ECTS/3 MCTS
Period: Fall semester

Host institution	School of Agroecology, Mongolian University of Life Sciences
Lecturer	Odongerel Sangidorj
Level	BSc course
Course type	Core course
Course duration	16 weeks
New/Revised	Revised
E-course link	https://online.num.edu.mn/dashboard

Summary

Students will provide the knowledge on general requirements for urban green space planning, classification of green areas, the purpose of planning, planning guidelines and standards, planning methods and techniques for children's playgrounds, outside of schools, streets and parks, and residential areas, roads and streets.

Target student audiences

Bachelor students majoring in Landscape Architecture

Prerequisites

- Required courses (or equivalents): Fundamentals of Landscape architecture LMD253
Computer mapping architecture- II LMD367

Aims and objectives

The main course objective is to provide lectures on the classification of urban green spaces and the basic concept of the purpose, teach them how to plan the green spaces by standard methods in the computer laboratory and provide major skills and knowledge.

The authentic tasks

After lectures for 2 hours, there will be laboratory practices for 4 hours.



General learning outcomes:

By the end of the course, successful students will:

Knowledge	<p>The course provides the students with the knowledge of:</p> <ul style="list-style-type: none"> ~ Knowledge of the fundamentals and importance of urban green space ~ Knowledge of the general requirements for urban green space planning ~ Knowledge of the classification and purpose of urban green space ~ Use of the guidelines and standards on green space planning
Application	<ul style="list-style-type: none"> ~ To plan the urban green spaces for each purposes based on classifications and standards
Analysis	<ul style="list-style-type: none"> ~ To develop critical thinking, analysis, and writing skills as they apply to Urban green space system planning
Synthesis	<ul style="list-style-type: none"> ~ To describe literature through discussion with classmates; explain topics by oral presentation
Competences	<p>The course will help students acquire competences, such as:</p> <ul style="list-style-type: none"> ~ Conduct urban landscaping research and partial planning ~ Mapping and identifying the urban green space planning models ~ Design of green areas according to purpose and standards ~ Monitoring the planning in accordance with guidances and standards

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, group work, written articles/essay ~ Project Based Learning ~ Literature review
Course outline	<p>Week 1: Importance of urban green space planning: General development plan for urban and rural areas</p> <p>Week 2: General requirements for urban green space planning General development plan for urban and rural area</p> <p>Week 3: Classification and purpose of green space General planning study of soum</p> <p>Week 4: Classification and purpose of green space General planning study of soum</p> <p>Week 5: Guidelines and standards for urban green space planning Planning overview on location map of soum</p> <p>Week 6: Children's playground planning and requirements Methods and methodologies for green space planning in residential and public areas (soum)</p> <p>Week 7: School's outside green space planning General green space planning of residential and public areas (soum)</p> <p>Week 8: Public space design and standards Methods and methodologies for green space planning in industrial areas</p> <p>Week 9: Hospital green space planning and requirements General green space planning of industrial areas</p> <p>Week 10: Tourist camp green space planning Methods and methodologies for green space planning in engineering networks and traffic roads areas</p> <p>Week 11: Park garden planning General green space planning of engineering network and traffic roads areas</p>

Week 12: Boulevards planning Methods and methodologies for green space planning in recreational and tourism areas
Week 13: Residence green space planning General green space planning of recreational and tourism areas
Week 14: Road traffic green space planning Methods and general green space planning for agricultural areas
Week 15: Street and road green space planning Methods and methodologies for green space planning in special-purpose areas
Week 16: Street and road green space planning General green space planning of special-purpose area

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	32
Moderated in-class discussions	Understanding various policy and legal environment and common problems in urban green space planning	Class participation and preparedness for discussions	8
In-class assignments, field assignment	Understanding various policy and legal environment and common problems in urban green space planning	Class participation and preparedness for assignments	8
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	8
Group presentation	Ability to interpret data, analyze on planning, and use the concepts, tools, and methodologies for the green space planning	Quality of group assignments and individual presentations	8
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 an urban green space, and be aware of information visualization tools and methods	Quality of group assignments and individual presentations	30
Course group assignment	Ability to conceptualize and frame a green space planning problems, find related literature and data, and interpret data, using the concepts, tools, and methods covered in the course	Quality of developed EDP and their presentation	25
Group presentation	Ability to interpret data, analyze the green space planning, and use the concepts, tools, and methods of planning	Quality of group assignments and individual presentations	25

Total		144
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Grading

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

Assessment	<p>Quiz or exercise (40%):</p> <ul style="list-style-type: none"> ~ Exercise (20%): students have to complete the quiz or exercise of each topic. ~ Homework (20%): 5, 9 and 12 seminars have additional assignments. <p>Assessment (30%):</p> <ul style="list-style-type: none"> ~ Group report consist of three assessments: At the end of the laboratory class, students will be divided into groups, and develop general green space planning of the soum including and completing the group report according to the specific requirements of each topic. <p>Final examination (30%)</p>				
	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 A- B B- C C- D D- F

Course Schedule

Week	In-class hours	Topic	Type
1	2	~ Importance of urban green space planning	Lecture
	2	~ General development plan for urban and rural area	Seminar
2	2	~ General requirements for urban green space planning	Lecture
	2	~ General development plan for urban and rural area	Seminar
3	2	~ Classification and purpose of green space	Lecture
	2	~ General planning study of soum	Seminar
4	2	~ Classification and purpose of green space	Lecture
	2	~ General planning study of soum	Seminar
5	2	~ Guidelines and standards for urban green space planning	Lecture
	2	~ Planning overview on location map of soum	Seminar
6	2	~ Public space design and standards	Lecture
	2	~ Methods and methodologies for green space planning in industrial areas	Seminar
7	2	~ School's outside green space planning	Lecture
	2	~ General green space planning of industrial areas	Seminar
8	2	~ Children's playground planning and requirements	Lecture
	2	~ Methods and methodologies for green space planning in residential and public areas (soum)	Seminar
9	2	~ Hospital green space planning and requirements	Lecture
	2	~ General green space planning of residential and public areas (soum)	Seminar
10	2	~ Tourist camp green space planning	Lecture
	2	~ Methods and methodologies for green space planning in recreational and tourism areas	Seminar
11	2	~ Park garden planning	Lecture
	2	~ General green space planning of recreational and tourism areas	Seminar
12	2	~ Boulevards planning	Lecture

	2	~ Methods and general green space planning for agricultural areas	Seminar
13	2	~ Road traffic green space planning	Lecture
	2	~ Methods and methodologies for green space planning in engineering networks and traffic roads areas	Seminar
14	2	~ Residence green space planning	Lecture
	2	~ General green space planning of engineering network and traffic roads areas	Seminar
15	2	~ Street and road green space planning	Lecture
	2	~ Methods and methodologies for green space planning in special-purpose areas	Seminar
16	2	~ Street and road green space planning	Lecture
	2	~ General green space planning of special-purpose areas	Seminar
Lecture 32 Seminar 32			

Course assignments/tests

Course assignments will consist of a multi-part project:

- ~ Assignment 1: Planning and designing of residential green space
- ~ Assignment 2: Planning and designing of green space attached to roads and square
- ~ Assignment 2: Scenic area and other recreation place planning

Literature

Compulsory:

1. S.Odongerel, A.Belguun (2020) "Urban gardening" handbook, Ulaanbaatar, 49 pages

Recommended:

1. Parliament, (2008) Mongolian Urban Development Law, Ulaanbaatar
2. Methodology for developing general urban development plans, Ulaanbaatar, 2000
3. Norms and rules of urban planning and construction "BNbD 30-01-04
4. Urban gardening and green space planning, UCS 0801A: 2022

Training materials:

1. General planning map of soum
2. AutoCAD software