

COURSE CODE: ENS-453
COURSE NAME: Urban Ecology
CREDIT HOURS: Theory = 3 Practical = 0 Total = 3
CONTACT HOURS: Theory = 48 Practical = 0 Total = 48
PREREQUISITE: None
MODE OF TEACHING: Three hours of lecture per week

COURSE DESCRIPTION:

This course is designed to develop a thorough understanding of the influence of urbanization and urbanized areas on populations, communities, ecosystems, and human societies.

TOPICS COVERED:

Week#	Topics
1	Introduction to urban ecology, Humans as components of urban ecosystems
2	Global urbanization patterns (past, present, future)
3	Recent trends in Pakistan
4	Populations and community diversity in the urban environment
5	Urbanization effects on environmental health
6	Functions in urban ecosystem
7	Growth, productivity and diseases
8	Exotic species and invasive species in urban areas
9	Midterm Exam – MSE
10	Landscape signature and urban heat-island effect
11	Ecological design and sustainable cities
12	Concept of urban green spaces for people and biodiversity
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14	Urban inequalities and slum area characteristics
15	Urban health and emerging diseases

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17	Urban land use planning and management in Pakistan
18	End Semester Exam

Text and Material:

1. Urban Ecology. Cambridge University Press, Cambridge. Gaston, K.J. (ed.) 2010.
2. Applied Urban Ecology. Wiley-Blackwell, UK. Richter M and U. Weiland (ed.) 2012.
3. Land-Use Planning for Sustainable Development, Silberstein, J. and Maser, C., CRC Press LLC. USA, (2nd edition) 2013.

ASSESSMENT SYSTEM:

Theoretical/Instruction	100%
Assignments	10%
Quizzes	15%
Mid Semester Exam	25%
End Semester Exam	50%

Practical Work	0%
Lab Attendance	0%
Lab Report	0%
Lab Quiz	0%
Lab Rubrics	0%