

Course syllabi

1. Data on the study programme

1.1 Institution	Technical University of Cluj-Napoca
1.2 Faculty	of Architecture and Urban Planning
1.3 Department	Urban planning and technical sciences
1.4 Domain	Architecture
1.5 University level	Licence and master's degree
1.6 Study programme/Qualification	Architecture
1.7 Form of studies	IF – on-site full-time studies
1.8 Course / studio code	77.00

2. Data on the course

2.1 Name of the course	URBAN ECOLOGY AND URBAN NETWORKS				
2.2 Course/ Studio Head	Associate professor Octav Silviu Olănescu, Arch. PhD				
2.3 Head of seminary/ laboratory/ studio	-				
2.4 Study year	5	2.5 Semester	2	2.6 Type of evaluation	Exam
2.7 Course /studio regime	Formative category: fundamental (DF)/ linked to the domain (DD)/ specific (DS)/ complementary (DC)				DD
	Compulsory (DI)/ Optional/ (DOP)/ Voluntary (DFac)				DI

3. Total estimated time

3.1 Number of hours/week	2	out of which:	3.2 Course	2	3.3 Seminary	0	3.3 Laboratory	0	3.3 Project	0
3.4 Number of hours/semester	28	out of which:	3.5 Course	28	3.6 Seminary	0	3.6 Laboratory	0	3.6 Project	0
3.7 Distribution of time (hours)/ semester for:										
(a) Individual study supported by course textbook, course text, bibliography, and notes										10
(b) Supplementary study in the library, online, and on site										10
(c) Preparation for seminars/ laboratories/ assignments, reports, portfolios, and essays										0
(d) Tutoring										2
(e) Examination										0
(f) Other activities										0
3.8 Total hours of individual study (sum (3.7(a)...3.7(f)))					22					
3.9 Total semestrial hours (3.4+3.8)					50					
3.10 Number of credits					2					

4. Preconditions (where applicable)

4.1 curriculum preconditions	-
4.2 competence preconditions	The skills acquired by completing the fundamental courses of: Environmental elements, Evolution of the contemporary city, Elements of urban design, Urban residential, History of architecture can constitute a basis for a good understanding of the concepts discussed in the Urban Ecology and Urban Networks course.

5. Conditions (where applicable)

5.1. for the course	In accordance with the ECTS/UTCN Regulation, art. 6.4, the FAU Council decides that the attendance of students at
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	courses in the academic year 2023-2024 is mandatory in proportion to 50%.
5.2. for the seminary	-

6. Specific competencies

	<ul style="list-style-type: none"> • Ability to gather information, define problems, apply analyses and critical judgement, and formulate strategies for action. • Ability to act with knowledge of historical and cultural precedents in local and world architecture • Understanding of heritage issues in the built environment. • Awareness of the links between architecture and other creative disciplines. • Awareness of the relevant codes, regulations and standards for planning, design, construction, health, safety and use of built environments. • Ability to act with knowledge of natural systems and built environments. • Awareness of the history and practice of landscape architecture, urban design, as well as territorial and national planning and their relationship to local and global demography and resources. • Awareness of the management of natural systems taking into account natural disaster risks.
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7. Objectives of the discipline

7.1 General objective of the discipline	<ul style="list-style-type: none"> • Understanding of the profession of architecture and the role of the architect in society, in particular in preparing briefs that take account of social factors
7.2 Specific objectives	<ul style="list-style-type: none"> • Adequate knowledge of urban design, planning and the skills involved in the planning process. • Understanding of the relationship between people and buildings, and between buildings and their environment, and of the need to relate buildings and the spaces between them to human needs and scale. • Knowledge of the means of achieving ecologically responsible design, environmental conservation, and rehabilitation, with a focus on relevant aspects of the 17 United Nations Sustainable Development Goals (Reference: https://sdgs.un.org/goals).

8. Content/Syllabi

8.1 Course	No. of hours	Teaching methods	Notes
C1 Introduction. The evolution of the human-nature relationship	2	Lectures supported by projections, Discussions on the reader of the course and presentations.	Students are encouraged to engage in talks throughout the course and to present the stage of their
C2 Sustainable development	2		
C3 Ecology and the built environment	2		
C4 Ecological theories with implications for the built environment	2		
C5 The urban ecosystem	2		
C6 The natural landscape – the built landscape	2		
C7 Urban ecology – Conflicts	2		
C8 Natural systems in the city: part I	2		

C9 Natural systems in the city: part II	2		individual study.
C10 Human structures. Green spaces, corridors, systems: part I	2		
C11 Human structures. Green spaces, corridors, systems: part II	2		
C12 Sustainable management of building networks	2		
C13 Case studies	2		
C14 Conclusions. Good practice studies	2		
NOTE: the permanent actualization of the course matter might lead to minor changes in its structure			
<p>Bibliography : OLĂNESCU, Octav Silviu, <i>Aspecte ecologice în determinarea mediului construit</i> (Cluj-Napoca: Ed. UTPRESS, 2018) 559.876 RIDDELL, Robert., <i>Sustainable urban planning: tipping the balance</i> (Malden, MA; Oxford: Blackwell Publishing, 2007) 537.918 WILLIAMS, Daniel E., <i>Sustainable design: ecology, architecture and planning</i> (Hoboken, NJ: John Wiley and Sons, 2007) 535.820</p> <p>Othe titles: BERKOWITZ, Alan R., Charles H. Nilon, Karen S. Hollweg (editori), <i>Understanding Urban Ecosystems</i> (New York: Ed. Springer, 2003) DRAMSTAD, Wenche, James D. Olson, Richard T. T. Forman, <i>Landscape Ecology Principles in Landscape Architecture and Land-Use Planning</i> (Washington D.C.: Ed. Island Press, 1996) FORMAN, Richard T. T., <i>Urban Regions: Ecology and Planning Beyond the City</i>, (Ed. Cambridge University Press, 2008) FORMAN, Richard T. T., <i>Urban Ecology: Science of cities</i> (Ed. Cambridge University Press, 2014) HALL, Peter, <i>Cities Of Tomorrow – Third Edition</i>, (Oxford: Blackwell Publishing, 2002) cotă 541.266 (1 exemplar)</p>			
8.2 Seminary / laboratory / project	No. of hours	Teaching methods	Notes

9. Harmonizing the content of the discipline with the expectations of the epistemic community, the professional associations, and representative employers

The way in which urban ecology and building networks are composed and articulated within the city constitute real challenges to which future specialists must respond in the current context characterized by the fusion of the three essential components of sustainable development: the economic component, the social component and last but not least the ecological.

10. Assessment

Type pf activity	10.1 Evaluation criteria	10.2 Assessment method	10.3 Calculation of final grade
10.4 Course	-	-	1 point by default
	Knowledge of the terminology used in ecology and urban planning	Written exam	3 points

	The ability to use notions regarding urban ecology and urban networks	Written exam	3 points
	Understanding and ability to analyze case studies	Written exam	3 points
Calculus of the final grade: as a sum of the points obtained through the evaluation methods described above.			
According to the ECTS/UTCN Regulations, art. 6.4, the Faculty Council has decided that attending courses is compulsory in a percentage of at least 50%. The situation of attendance will be updated weekly on the Teams channel dedicated to the course. Students who have not attended 50% of the courses will not be able to participate in the final exam and will need to recontract the course.			
10.5 Seminary/Laboratory	3 application-type topics completed during the seminar hours	Assessment of homework	-
10.6 Minimal standard for passing			
• a grade of minimum 5			

Date :	Head of course	Title, Name, Surname	Signature
14.07.2023	Course	Associate professor Octav Silviu Olănescu, Arch. PhD	
	Seminary/Lab		-

Date of validation by the Department Council: _____	Chief of Department Associate professor Vlad Sebastian Rusu, Arch. PhD
Data of approval in the Faculty Council: _____	Dean Associate professor Dragoș Șerban Ion Țigănaș, Arch. PhD