POLITECNICO
MILANO 1863

SCUOLA DI
ARCHITETTURA
URBANISTICA
INGEGNERIA DELLE COSTRUZIONI

Attribuzione crediti formativi
per Workshop – Workshop tirocinanti
Workshop accreditation request

Docente Responsabile/ *Reference Professor*	Antonella Contin
Docente proponente/*Proposing professor*	Antonella Contin
Corso di Studio proponente/*Proposing study programme*	099560 - ARCHITECTURAL DESIGN STUDIO 1 [Sezione A] / 099562 - SUSTAINABLE ARCHITECTURE _ Campus Piacenza
Altri docent/*other professors involved*	Yara Valverde Fernanda Lemos (Laboratório de Urbanismo │ U.Lab Núcleo Interdisciplinar de Meio Ambiente │ NIMA Departamento de Arquitetura e Urbanismo │DAU Pontifícia Universidade Católica do Rio de Janeiro │ PUC-Rio) Giovanni Santamaria (NYIT, New York) Maria Villalobos (Chicago IIT)
Titolo dell'iniziativa/*Title*	International Exchange Program 2019 M.A.Rio: **M**etropolitan **A**pproach for **RIO** de Janeiro
Tipologia/*type*	Workshop/Seminario
Lingua di erogazione/*language*	English
ore previste/*expected duration-hours*	In presenza/*in presence*: 60 Lavoro autonomo/*independent work*: 40
periodo di svolgimento/*workshop period*	24.11.2019 02.12.2019
sede di	Pontifícia Universidade Católica do Rio de Janeiro │ PUC-Rio

svolgimento/*location*	

breve descrizione/brief description	Metropolitan Approach for RIO de Janeiro: geographical tools & metropolitan food and water system analysis for the Rio de Janeiro Metropolitan Projects Acupuncture **Introduction** The workshop presents a metropolitan vision, aiming at the improvement of the Practice of the Metropolitan Discipline with new competences of shaping and re-shaping the metropolis. It takes an interdisciplinary approach, integrating various disciplinary knowledge, transversal management skills, dealing with the metropolitan complexity and fragmentation. It also intends to bridge the gap between the theory and practice by specifying the metropolitan needs and gaps in the practice and define the intellectual tools to overcome them. In particular, we would like to explore the **Metropolitan Forest** issue. To do so we will introduce the concept of Botanical city introduced by Burle Marx, and innovated by Maria Villalobos Assistant Professor at Chicago IIT. Main Issues towards a Tropical Botanical (Ecological?)City: 1. Biological, cultural, and programmatic connectivity across scales not only of space but also of time. 2. Moments of legibility and pedagogical intensity in the urban landscape/memory and restoration opportunities. 3. Biological and urban diversity/ homogeneous solutions are not sustainable. 4. Performativity and adaptive management strategies/beyond autocracy. 5. Physical and programmatic flexibility to allow for transformative spontaneity/no need to control it all. **Questions of research** • How the resilient articulation of the interface between the city and nature can promote the quality of dwelling and ensure the human well-being within the metropolis? • how to create a new public realm within the “collaboration” between city and nature? • how to create new opportunities for local population? • how the Metropolitan Approach can support the conservation of local natural and cultural heritage? • how to conserve the natural capital of landscape, fresh water and environment dealing with an urban agricultural settlements project? • how to think of long-term strategies of strategically manage of urban and economic development, emphasizing spatial heterogeneity and scale, especially in the informal part of the city, considering variability, uncertainty and irreversibility as decisive factors in city dynamics, as complex landscapes (Naveh, 2007)? **Project Sites** *a. Município de Nova Iguaçu. The Nature_ City pact* A nature/city pact is more than possible - It is necessary. Nova Iguaçu, as much as Rio, have great opportunities in its territory to use green infrastructure to enhance this balance, provide many essential ecologic services and improve life quality in the city. We are interested in the possibility of reducing disaster risk, mainly floods, within the city with multi-functional nature-based solutions for human security goals in the climate change scenarios. The Border of the Município de Nova Iguaçu is the Atlantic Forest. The idea is to let the forest entering into the Município de Nova Iguaçu ‘s city fabric so the proposal concerns the possibility of regenerating portions of the city of Nova Iguaçu through a project for a common or public space based on green armour. The area of the project is the side of the city bordering this forest. Due to a nature/city pact, is it possible that the wedges of green infrastructure penetrate the city acting as regulatory services for the health of the city. Is it possible to define a pact between metropolis and forest? Can the city growth within the forest? can the city protect the forest ecosystem so that the forest could help the city basic function to be sustainable? Could a forest be tamed so to become the backbone for a metropolitan green-grey armature able to host new land uses (i.e. common or public spaces)? *b. Cosme Velho_ The Largo do Boticário. The History _City pact* The Largo do Boticário (Apothecary's Square) is a square in the Cosme Velho neighborhood of the city of Rio de Janeiro in Brazil. The square can be reached by the

	Beco do Boticário (Apothecary's Alley), that passes by the Carioca River. The area is characterized by large, neo-colonial houses and Atlantic Forest vegetation. After a heraldic past, today the district reveals a mainly worker character and a low quality of the building consistency of buildings and places of commerce. The urban regeneration project involves the small colonial square and its symbolic role today in the overall metropolitan centrality. The project aims to achieve innovation and social evolution through the transformation of the neighbourhood into a cultural centre by introducing new functions that can trigger a change of uses and times of the city. **Workshop and seminar focus and specific practices and topics of design** Apply evidence-based approaches for assessing the compliance of the municipal land use plan with the ecosystem conservation and restoration model through new built form types based on ecosystem- based approach model. **Goals** 1) Develop a project of metropolitan architecture that takes into account the value of each element, built or not, at different scales, and their interactions. The metropolitan architecture project is about one kilometre by one kilometre in size, and in this case, it involves a new centrality between the edge of the city and nature. It is in all respects a rural-urban linkage project, but in a tropical context that, unlike the European one, does not have agriculture as a buffer zone: _ Use evidence-based approaches to identify ecosystems that make important contributions to the water supply and quality in the metropolis _ Identify causes of ecosystem loss and degradation, including the impact of urban sprawl, agricultural expansion, industrial activities, climate change and other major drivers _ Identify architecture and urban design methodology, using the Urban Rural Linkage Guiding Principle provided by UN-Habitat to conserve and restore the ecosystems most essential for maintaining water supply and quality at the urban and metropolitan architectural scale **Structure** During this period, students coordinated by professors from the several universities invited will take part to lectures, site visits and researches to work at their design proposals for assigned site: Município de Nova Iguaçu Researches as well as design proposals will engage several dimensional scales (Metropolitan- region, Urban- city, Local- from neighbourhood to building systems) and will relate to post-industrial landscapes and processes of urban metabolic change.

Parole chiave/*key words*	Metropolitan Architecture, Evidence-based approaches, Urban Rural Linkage

Eventuali pre-requisiti di conoscenza e abilità richieste/*requested knowledge and skills, if any*	Knowledge of programs such as QGis or ArchGis is desirable so to be able to process the maps of the Metropolitan Cartography, but in any case tutorials will be offered to learn the basic theoretical and practical notions of mapping
Numero Massimo di studenti/*maximum number of students*	
Criteri di selezione, se previsti/*selection criteria, if any*	

contatti /*contacts*	mail antonella.contin@polimi.it	tel. 02 2399 5527; 348 7844260
website	http://www.metropolitan-architecture.polimi.it/	

Note/*notes*	Per poter dar vita al workshop presso una università privata straniera è necessario chiedere un contributo economico (sempre al di sotto dei 500 euro) agli studenti volto a: • acquisto materiali per la stampa, • affitto degli spazi per le lezioni,

	• affitto dei mezzi di trasporto per la visita al sito di progetto, • materiale per le traduzioni simultanee durante il seminario (momento fondamentale perchè vengono invitati docenti di altre università e a volte di altre nazioni), • pagamento per i traduttori • pagamento del gettone per i reviewer o i conferenzieri differenziato se provenienti da una università locale o diversa dalla città dove si svolge il workshop (questa è una prassi in molte università straniere, sono cifre irrisorie ma devono essere corrisposte. Una delle ragioni principali per le quali organizzare questi workshop è legata alla possibilità di entrare in contatto con docenti che non potrebbero essere facilmente invitati in europa, sentire le loro lezioni e avere le loro revisioni) • pagamento di viaggio e alloggio per i docenti politecnico che accompagnano gli studenti e che lavorano con loro per tutta la durata del workshop.

Indicare il Corso di Studio proponente e gli altri Corsi di Studio ai quali è rivolta l'attività e per i quali è possibile riconoscere i crediti – *Indicate the proposing Study Programme and the other Study Programmes to which the activity is addressed and fro which it is possible to give credits*

CdL	**LAUREE TRIENNALI/BSc**	**VALIDO PER/ Valid for**
L23	INGEGNERIA EDILE E DELLE COSTRUZIONI	
L17	PROGETTAZIONE DELL'ARCHITETTURA	x
L21	URBANISTICA: CITTA' AMBIENTE PAESAGGIO	x

CdL	**LAUREE MAGISTRALI E CICLO UNICO/MSc and 5 year single cycle degree**	**VALIDO PER/ Valid for**
LM 4/ CU	INGEGNERIA EDILE-ARCHITETTURA/BUILDING ENGINEERING-ARCHITECTURE	X 3 CFU TIROCINIO
LM4	ARCHITECTURAL DESIGN AND HISTORY	
LM4	ARCHITETTURA - ARCHITETTURA DELLE COSTRUZIONI/ BUILDING ARCHITECTURE	x
LM4	ARCHITETTURA - AMBIENTE COSTRUITO - INTERNI - ARCHITECTURE - BUILT ENVIRONMENT - INTERIORS	x
LM4	ARCHITETTURA E DISEGNO URBANO - ARCHITECTURE AND URBAN DESIGN	x
LM4	SUSTAINABLE ARCHITECTURE AND LANDSCAPE DESIGN - ARCHITETTURA SOSTENIBILE E PROGETTO DEL PAESAGGIO	x
LM24	BUILDING AND ARCHITECTURAL ENGINEERING	
LM24	INGEGNERIA DEI SISTEMI EDILIZI	
LM24	MANAGEMENT OF BUILT ENVIRONMENT	
LM48	URBAN PLANNING AND POLICY DESIGN - PIANIFICAZIONE URBANA E POLITICHE TERRITORIALI	x
LM3	LANDSCAPE ARCHITECTURE. LAND LANDSCAPE HERITAGE	x

La Giunta di Scuola, vista la proposta di workshop presentata attribuisce numero e tipologia dei seguenti crediti formativi/*the School Council, having examined the request, accredits the activity for the following number of credits:*

n. crediti /*credits*	**4**	**Equivalenti ad attività a libera scelta/*equivalent to elective course***

oppure

n. crediti */credits*		**Equivalenti al tirocinio/*equivalent to internship***

Firmato digitalmente