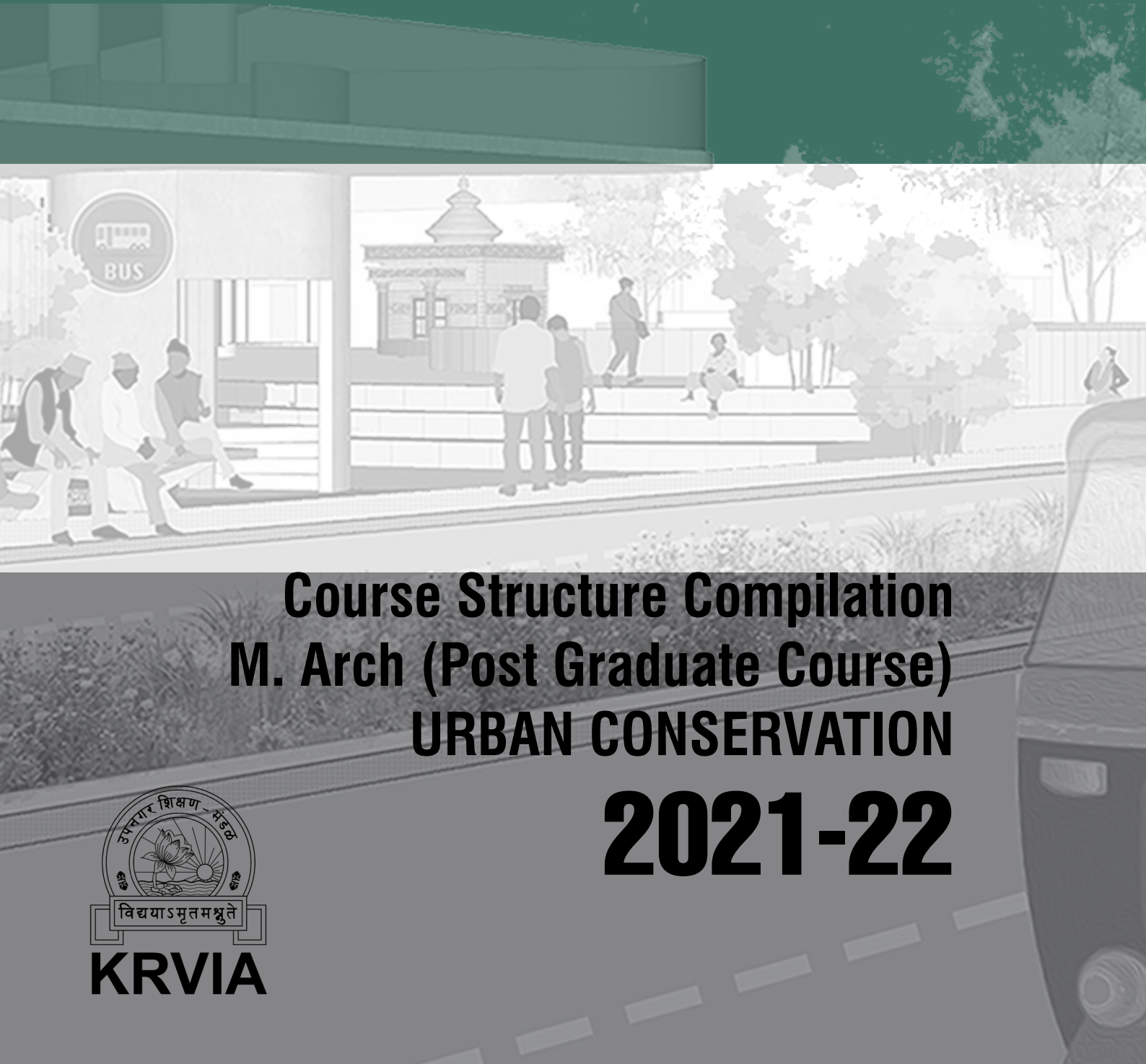


USM's
Kamla Raheja Vidyanidhi Institute for Architecture & Environmental Studies

K R V I A



Course Structure Compilation M. Arch (Post Graduate Course) URBAN CONSERVATION

2021-22



Approved by
Council of Architecture

Affiliated to
University of Mumbai

USM's
Kamla Raheja Vidyanidhi Institute for
Architecture & Environmental Studies

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The KRVIA

Our Vision and Mission

“The KRVIA vision dwells on the imagination that the institute shall be an important knowledge centre for research in architecture & urbanism. Stemming from this imagination, the architectural inquiry seeks for embedded conditions through a multi-disciplinary platform. As a result, KRVIA, through the years, has witnessed the rise of multi-disciplinary faculties who have gained expertise by enriching their knowledge of the subject. The naïve contextual urbanism of the earlier stage that was seen as a manifestation of architecture with an urban inquiry is now expanding into questions of urban realm where the sphere of architecture constantly finds itself negotiating with newer emerging urban forces”.

The most important projects that the institute undertook in this phase were several international consortium and research projects. The formation of the post-graduate program is an outcome of all these endeavours. The discourse on architecture began to create a significant bridge between profession and discipline. The discipline discourse on architecture and urbanism are envisioned around four fundamental domains i.e. knowledge domain, practice domain, critical domain, and regional domain.

In order to embark on the future of an Institute, it becomes paramount to scan through the trajectory of an institute and its formative circumstances. The long evolution of KRVI has witnessed a systematic shift of pedagogy over a period of twenty-eight years. The emerging pedagogy is finely grained in its long-term philosophical foundation laid by the founding director. This is perhaps the time to trace the history of pedagogic trajectories and move with regards to the larger rationale towards an emergence of a new academic paradigm.

KRVI was the product of a liberal economic policy in education. During its formative years, the founder director set the tone of the institute's pedagogy. The formative circumstances of KRVI had to deal with the existing dogmatic structure of evaluation-based academics, undermining the enabling and engaging-based academics. The founding director enabled the process with fresh ideological questions on Indian Aesthetics. The teaching methods revolved around the question of representation and aesthetics. The architecture emerged as an assemblage of various forces that were assumed to be Indian. This phase also founded the various theoretical discourses around global architectural theories and its relevance in the Indian context. The emergence of inter-disciplinary understanding, the Encounter lecture series and the annual journal (Reflections) are important milestones that have formed KRVI as an important centre for architectural learning.

The second phase witnessed the shift of aesthetic-based pedagogy to context-based inquiry. Architecture was seen as a product of contextual expression and object of naïve urbanism. The architecture was seen as an artifact of the urban place. KRVI also witnessed the de-centralization of academics with respect to the academic decision-making process. This phase enabled the consolidation of subject expertise and concentration of discipline inquiry.

The third phase took the urban agenda forward where the architectural inquiry constantly sought for embedded conditions through a multi-disciplinary approach. The rise of multi-disciplinary faculty has enriched individuals with subject expertise. The naïve contextual urbanism is now seen as a manifestation of the urban realm where the sphere of Architecture constantly found itself negotiating with urban forces. The most important project that the institute took under in this phase were several international consortium and research projects. The formation of the post-graduate program is an outcome of all these endeavours. The discourse on architecture began to create a significant bridge between profession and discipline.

The discipline discourse on architecture and urbanism were staged around four fundamental domains i.e. knowledge domain, practice domain, critical domain and regional domain. The naïve contextual-ism paved the way for a regionalism discourse.

However, standing at current positions, one may raise fundamental questions which are apparent and necessary, simultaneously because the pedagogic structure must address the unfolding reality and emergence of new paradigms and technology.

These questions are:

Does the multi-disciplinary approach paralyze the question of design and aesthetics?

Is the urban question on architecture, claustrophobic?

Is the sphere of architecture reducing? Is it a global phenomenon?

How is it relevant to India?

The KRVI vision for the coming years is embedded in the above stated questions. Hence it is necessary to imagine the pedagogic structure on this existing foundation and yet be forward and outward looking. The trans-disciplinary narrative perhaps can re-configure the existing edifice and the critical regional question becomes a force to reckon with, that would encompass the conceptual framework drawn with diverse forces. The future of architectural pedagogy is at the hands of individuals with newly cultivated knowledge anticipating manifestation at various scales. It is a stage where pedagogy needs to climb the ladder of epistemological understanding through various disciplines and build a conceptual framework for architectural learning (trans-disciplinary learning). The epistemic understanding through a trans-disciplinary mode allows fresh inquiry into the role of architecture, architectural and urban questions.

Changing times and new learning methods have challenged the existing methods of teaching, learning and time. Perhaps it is time for a change in spatial infrastructure and its physical manifestation. As a result, education methods and modes are changing dramatically, with the distinctive rise of e-learning, wherein teaching is undertaken remotely and on digital platforms. These changes that have come about now are here to stay for a while and we have to see it as an opportunity and also as range of alternatives. However, it is important to upgrade architectural learning with resources in the form of physical and spatial means. The existing infrastructure at KRVI is equipped to sustain an equitable & inclusive, enabling & sustaining a physical as well as e-learning ecosystem.

KRVIA Academic Trajectory

Knowledge Domain | Critical Domain

Critical

Representational

History + Architectural Theory

Architecture
discourse of
Social and
Cultural
imperatives

Architecture
Speculation
on Past,
Present &
Future

Liberal Arts

Architectural
Narration in
Art, Literature
and
Philosophy

Studios + Thesis

Narration
of
Architectu
ral
Question
and Brief

Studio

Place
People
Geography

Urban | Practice Domain | Region Domain

Presentation

- Study Tour
e,
ple
ography
- Visual Studies + Applied Studies
Study of
Patterns,
Principles,
drawings
- Study of
systems
Materiality and
Situating

Research

- Epistemology
Structure of
Knowledge.
Context,
Meaning and
Insight
- Methodology
Research
Fundamental &
Development of
Knowledge

MMA

MA
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The Masters in Architecture Program

M.Arch

Vision Statement

The Master of Architectural and Urban Conservation is a specialised course wherein the learner who has completed a five-year architectural degree program and has some experience as an architect, researcher, or teacher, returns to an academic institution to pursue issues of conservation in the urban realm. Architecture is a spatial, socio-cultural construct and specialisation in various streams dwells deeper on subject matter with a theoretical framework. The content for discussion not only focuses on the subject matter for a specialised course but addresses broader contemporary issues that are mainstream discourses internationally. This is the only course in India that broadens the scope of Architectural Conservation to the urban realm and examines issues such as ecological and cultural landscapes without compromising on

the conservation of the architectural built form. This two-year program in Architectural and Urban Conservation is affiliated with the University of Mumbai and is approved by the Council of Architecture, New Delhi. The program outcomes for the course are derived based on the caliber of the student intake and the professional standards we want them to achieve as practitioners. Since the program has a very short period of engagement within the institute, we have a lot to achieve in a limited period of time. The institute strives to create a practitioner who has the ability to critically understand the context, to recommend real and speculative propositions, validated with theoretical positions.

The institute strives to create a practitioner who has the ability to critically understand the context, to recommend real and speculative propositions, validated with theoretical positions.

Program Intent:

Program Objectives (PO'S)

Modes of Enquiry

What is the Context?

The question about the context is the first and foremost fundamental issue when discussing the scale of urbanity, as infrastructural grids have notionally reduced the physical space. With Geographical information and remote sensing, it becomes relatively easy to identify large regions that are at the cusp of development that need our attention that threaten the historic and cultural fabric of a place. The scale of discussion oscillates from the macro level of regional issues that have an impact on the ecology to the micro-scale of the urban form of the neighbourhood. Intangible issues that need to be resilient to these threats are an important aspect and are also part of the discourse.

As a conservation researcher, one can easily get overwhelmed by the enormous quantum of data that can be easily captured from the comforts of a laboratory through a satellite and zoom into the minute detail of the architectural artifact. One needs to make sense of all this data and it is important for the learner to see patterns and decipher the material to articulate lenses for critical questions that need not align with the narrative of the governing bodies. In academia, this is the only opportunity for a learner to ask these critical

questions. The logical structuring of these questions needs a solid foundation, maturity and rigorous hard work to draw conclusions for an alternative narrative.

Propositions for Conservation in the Urban Realm.

The very practice of architectural and urban conservation requires the practitioner to speculate propositions that are a result of the critical questions. Urbanity is in a fluid state ever-changing based on the trends that stem from realities such as geo/politics, social structures, and speculative markets. The premise to understand the larger region is to understand that the precinct or artifact in question cannot be isolated by the inherent pressures of urbanity. A top-down approach that does not acknowledge all these intangible aspects and network systems must have the bandwidth to adapt to such issues. The very nature of this specialization is to protect the precinct or built artifact from pressures of threat, harm or danger.

Propositions thus need to have a framework that acknowledges all these nuances with a phased-wise approach. These propositions need to have

'Instruments for implementation'. These instruments for implementation cover a wide range of issues including engagement with stakeholders, governance, policy, management plans and finance. To dwell on these aspects there is a need to determine one's own strengths, abilities, and position as a practitioner in the urban realm with a focus on conservation of tangible and intangible aspects

Theoretical positions.

The contemporary world is flooded with data. The allied urban disciplines need to be acknowledged however as trained architects we need to fix our gaze on urban architectural interventions through the lens of conservation. The important issue is the skill to recognize the right data that can be extracted for analysis and interpretation.

The course in Architectural and Urban Conservation introduces the learner and touches upon all the allied aspects of the urban realm however the assimilation and synthesis of this matter is expected in the design studio. This design course is the space to demonstrate all these learnings through a lucid representation and presentation.

Technical competency.

The contemporary world is flooded with data. The allied urban disciplines need to be acknowledged however as trained architects we need to fix our gaze on urban architectural interventions through the lens of conservation. The important issue is the skill to recognize the right data that can be extracted for analysis and interpretation.

The course in Architectural and Urban Conservation introduces the learner and touches upon all the allied aspects of the urban realm however the assimilation and synthesis of this matter is expected in the design studio. This design course is the space to demonstrate all these learnings through a lucid representation and presentation.

Research to produce new knowledge.

With an ever changing urban realm, the issues and theoretical positions can be challenged with contemporary thought. Concerns around ecology, climate change, and coping mechanisms such as resilience need to be the topics of contemporary research. A tightly bound syllabus can allow for such topics of discussion only if these are pedagogical concerns within the studio.

The PO's

- 1. To acquire the ability to critically understand the context**
- 2. To be able to recommend real and speculative urban propositions**
- 3. To be able to validate urban interventions with theoretical positions.**
- 4. To be able to achieve technical competency for the respective streams.**
- 5. To undertake research for the production of new knowledge.**

Thematic Cycle

The masters program follows a thematic three year cycle. The three year cycle is the optimum time period to create subject matter in the first year, improve material for the second year and draw conclusions in the last year so as to facilitate the production of knowledge for both the stakeholders, the faculty and the students. The themes are as follows

2015- 2016	Building Inclusive Urban Communities (BInUCom)
2016 - 2017	
2017 - 2018	
2018 - 2019	Resilience- Building Resilient urban Communities (BeRuCom)
2019 - 2020	
2020 - 2021	
2021 - 2022	Infrastructural Urbanism
2022- 2023	
2023 - 2024	

Courses

Course Components and Structure

Lecture Based Courses

In these courses the fundamentals of conservation are taught through lectures based on the thematic cycle encompassing new subject matter and readings for in depth understanding of the theme. The assignments formulated align with the theme so as to gauge the assimilation of subject matter.

Studio courses

The audited courses are additional over and above the mandated syllabus mandated by Mumbai University and are an important space to create subject matter based on the current thematic cycle. Faculty prepare subject material based on their own research work or research papers or books.

Along with these courses we encourage several workshops with Non government organisations, and institutions of state, national and international repute.

Special lectures by invited guest speakers are organised so as to ensure a comprehensive understanding of the theme and the studio subject matter.

Audited Courses

The audited courses are additional over and above the mandated syllabus mandated by Mumbai University and are an important space to create subject matter based on the current thematic cycle. Faculty prepare subject material based on their own research work or research papers or books.

Along with these courses we encourage several workshops with Non government organisations, and institutions of state, national and international repute.

Special lectures by invited guest speakers are organised so as to ensure a comprehensive understanding of the theme and the studio subject matter.

Thesis Courses

The thesis program is the final culmination of the specialisation studies. The learner has matured to make an argument about his individual thesis project through text and drawings to an external jury appointed by the University of Mumbai.

Para Academic activities

Exchange Programs

The KRVA has several Exchange Programs with international academic institutes and students are encouraged to attend the same. The learner has the ability to cope with the additional load of work as several initial and tutoring is conducted on line with a limited workshop based approach for the visit.

International Collaborations

The establishment of the institute as a meaningful space for academia has catalysed international grants from the European Union. In the first program BInUCom three European institutions had collaborated with KRVA - Krems, Austria; Lund University Sweden and ITC University of Twente, Netherlands. In the second program BReUCom Krems, Austria; and ITC University of Twente, Netherlands were the collaborators. Students were required to attend the workshops and professional development programs.

Research Grants

On the research front the KRVA was selected as one of the 15 premier institutes of the country from the western region for SAAR- (Smart cities and Academia towards Action and Research) by NIUA, MOUHA and Smart City Mission. This program involved 75+ case studies which have been documented into a compendium based on Urban Management, Climate change and Resilience Urban Infrastructure with the students as on ground researchers and faculty as mentors.

All such academic and para academic activities ensure that the vision statement of the masters program and the mission statement of the Institute is attained. With each passing academic year the institute strives to ameliorate each and every realm of academia for the benefit of all the stakeholders.

2021-22

The Program Outcomes

- 1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.**
- 2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.**
- 3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.**
- 4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.**
- 5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.**

Semester 1

Scheme of Teaching and Examinations

	EXAM CONDUCTED BY COLLEGE	TEACHING SCHEME			
	Semester I	Lecture	Studio	Total	Credits
C1a	Conservation Theory	3		3	3
C1b	Planning Techniques and Procedure	2		3	3
C1c	Archeology	2		2	2
E1a	Theory & Methods of Urban Design	3		3	3
E1b	Conservation techniques & procedures (Traditional built Form)	2		2	2
S1a	Mapping, Documentation & Analysis of Urban Form & Settlements		6	6	6
S1b	Urban Ecology & Natural Heritage		6	6	6
		13	12	25	25

SCHEME OF EXAMINATION SEMESTER I					
		EXAM SCHEME			
		Theory (Paper)	Sessional Work		Credits
Semester I			Internal	External Viva	
C1a	Conservation Theory	50	50		100
C1b	Planning Techniques and Procedure	50	50		100
C1c	Archeology	50	50		100
E1a	Theory & Methods of Urban Design		50		50
E1b	Conservation techniques & procedures (Traditional built Form)		50		50
S1a	Mapping, Documentation & Analysis of Urban Form & Settlements		200		200
S1b	Urban Ecology & Natural Heritage		200		200
	TOTAL	150	650		800

URBAN CONSERVATION

2021-22

Semester 1

		MONDAY	TUESDAY	WEDNESDAY
PG 1	8.00 - 8.50	Studio I (UD +UC)	Urban History (UD) Sanaeya Vandrewala	Academic (UD+)
	8.50 - 9.40			Sarah George Aditya S
	9.40 - 10.30			
	10.30 - 11.20	Rohan Ainsley Aaradhana Sanaeya Apoorva	Conservation Tech + Procedures (UC) Apoorva Iyengar	Conservation of M UD+ Sanaeya V
	11.20 - 12.00			
	12.00-12.50	Studio:I (UD+UC) (Working Studio)	Cons. Tech + Procedures (UC)	Conservation of M UD+
	12.50 - 1.20	L U I		
	1.20 - 2.10	Studio:I (UD+UC) (Working Studio)	Urban Sociology UD Binti Singh Aaradhana	Data Ur UD+
	2.10 - 3.00			Paul A

Semester I

Time-Table

WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Academic Writing (UC) Dr. Binti Singh Sawant	Studio I (UD + UC) Rohan Aaradhana, Ainsley Sanaeya, Apoorva	Urban Ecology & Landscape (UD + UC) Shweta Wagh	
Modern Heritage (UC) Anandrewala		Conservation Theory (UC) Sanaeya Vandrewala	Archaeology (UC) Andrea Baptista
B R E A K			
Modern Heritage (UC)	Studio: I (UD+UC) (Working Studio)	Conservation Theory (UC)	
M O N D A Y B R E A K			
Urbanism (UC) Anankush	Theory & Methods of Urban Design (UD+UC) Manoj Parmar, Aaradhana	Planning Technique & Procedure - I (UD+UC) Aditya Sawant, Binti Singh	

Urban Design
 Choice Elective I: Academic Writing
 Choice Elective II: Urban Sociology

MODULE: CONSERVATION THEORY

THEORY COURSE FORMAT: SESSIONS 16| STUDENT ASSIGNMENTS 2 |

STUDIO FORMAT: STUDENTS PRESENTATION | FACULTY PRESENTATION

Aim

Creating awareness about the different approaches towards conservation over time and the modern theories /strategies of conservation

Course Objectives

- To introduce the philosophy of conservation
- To introduce the history, main concepts/ideas, principles, and theories of conservation

Methodology and Method of Instruction

Learning & attempting evolution of various conservation approaches. Understanding History of Conservation Movement Internationally and in India. Studying various Philosophy & Discourses; Differing schools of thought within the practice.

Learning Outcomes

Instilling the ability of the students to understand What and Why to conserve. Understanding functioning of various International Bodies, Charters & changing Trends: ICOMOS/ICCROM / INTACH. To be able to comprehend scope of conservation in the Indian context.

SESSIONS	TOPICS TO BE COVERED
Session 1 17-12-21	Introduction to Conservation Theory. Every student expresses their understanding of Conservation and how they view it in the current scenario in the country.
Session 2 07-01-22	Understanding various Conservation methods such Restoration, Adaptive Re-use, Revitalization, anastylosis, Re-construction etc. and its application in case studies
Session 3 14-01-22	International bodies ICOMOS, ICCROM and various charters such as Venice, Athens, Nara, Washington etc.
Session 4 21-01-22	Charters Part 2
Session 5 28-01-22	Conservation in Indian context. Specifically discussing ancient conservation practices, foundation and role of ASI in colonial India, ASI after independence, INTACH, heritage conservation committees in cities post 1995
Session 6 04-02-22	Working session
Session 7 11-02-22	Assignment 1 – Review of the INTACH charter while comparing its pros and cons to various international charters
Session 8 18-02-22	Assignment 1 – Review of the INTACH charter while comparing its pros and cons to various international charters
Session 9 25-02-22	Alois Riegl conservation theory
Session 10 04-03-22	Heritage Discourse -western and eastern philosophies (SPAB manifesto), LauraJane Smith
Session 11 04-03-22	Venice charter revisited

Session 12 18-03-22	Patina Discourse – How aging is viewed in different conservation approaches around the world. Is it acceptable and to what extent? Understanding how patina is developed on various building materials its impact and whether it can be considered as part of a historic fabric.
Session 13 25-03-22	Working session
Session 14 01-04-22	Assignment 2- Conservation theory for 21 st Century in context with Indian Heritage
Session 15 08-04-22	Assignment 2- Conservation theory for 21 st Century in context with Indian Heritage
Session 16 22-04-22	Exam prep

Assignment	
Assignment 1	Review of the INTACH charter while comparing its pros and cons to various international charters
Assignment 2	Conservation theory for 21 st Century in context with Indian Heritage

CO-PO mapped syllabi of Master's in Architectural & Urban Conservation 2021-2022 – Conservation Theory

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

Programme outcomes:

1. To acquire the ability to critically understand the context.
2. To be able to recommend real and speculative urban propositions.
3. To be able to validate urban interventions with theoretical positions.
4. To be able to achieve technical competency for the respective streams.
5. To undertake research for production of new knowledge.

Course: Conservation Approaches

University Course Code: C1A

Sem- 1

Year - First

KRVIA Course Code: UCTH-633

Course Objectives:

1. Creating awareness about the different approaches towards conservation over time and the modern theories /strategies of conservation.
2. To introduce the philosophy of conservation.
3. To introduce the history, main concepts/ideas, principles, and theories of conservation

Course Outcomes:

1. Instilling the ability of the students to understand the premise for conservation.
2. Understanding functioning of various International Bodies, Charters & changing trends
3. Able to comprehend scope of conservation in the Indian context.

USM's Kamla Raheja Vidyandh Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task Assessment									
Grade	O++	O+	O	A	B	C	D	E	Fail
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
Area of Evaluation									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak Based on biased hypothesis.	Not acceptable
Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map , drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

CO-PO Mapping:

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Instilling the ability of the students to understand the premise for conservation.	3	3	3	2	3
CO2	Understanding functioning of various International Bodies, Charters & changing trends	3	3	2	2	2
CO3	Able to comprehend scope of conservation in the Indian context.	3	1	3	2	1

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation
0 – No Correlation

MODULE: SEM I 2021-22 – PLANNING TECHNIQUES

THEORY COURSE FORMAT: 16 WEEKS | STUDENT ASSIGNMENTS 1

STUDIO FORMAT: STUDENTS PRESENTATION | CASE STUDIES | FACULTY PRESENTATION

UNIVERSITY CODE: MUDC 103

KRVIA CODE: UDP 633.1

COURSE OBJECTIVES

The course will try to understand planning and its institutional framework in the Indian context, focusing on the city of Mumbai. India is rapidly going through the process of urbanization with the expected 40-45% of population residing in urban areas. The intent of the course is to understand various ways the urban planning strategies are conducted at government level. Urban planning in India is based on development plans, regional plans, zonal plans, zoning regulations, urban byelaws and various policies set up by the state government. Various past planning approaches are studied and critiqued as most of the methods adopted in India are parochial and unable to meet pace with the rapidly changing dynamics of eco-socio-cultural aspects of the urban areas. To address these various changing facets of urban planning such as social, economic, cultural, legal, political, ecological, technological, aesthetic, geographical, and so forth, new tools and techniques need to be understood and incorporated to understand, analyse, and influence the above-mentioned variety of forces and shaping of the built environment.

- (CO1) Critical evaluation of history and principles of planning in the international and national context
- (CO2) Understanding of institutional and legal framework of planning at the national, state and city level
- (CO3) Analyzing the application of planning techniques and approaches within different contexts and issues

Programme outcomes:

- To acquire the ability to critically understand the context (PO1)
- To be able to recommend real and speculative urban propositions (PO2)
- To be able to validate urban interventions with theoretical positions (PO3)
- To be able to achieve technical competency for the respective streams (PO4)
- To undertake research for production of new knowledge (PO5)

FACULTY: ADITYA SAWANT , BINTI SINGH

SUBJECT: PLANNING TECHNIQUES 16 weeks

SESSIONS	TOPICS TO BE COVERED
8-07-21	Introduction and overview share readings

15-07-21	<p>Ancient, classical and medieval, Renaissance and Baroque antecedents Kostof, Spiro, 1991. "Chapter 1: Organic Patterns," in Kostof, Spiro, <i>The City Shaped</i>, Boston: Bulfinch Press, 43-93.</p>
22-07-21	<p>Planning the 19th-century industrial city: Suburbs, new towns, parks Ch. 3, in Peter Hall, <i>Cities Of Tomorrow</i></p>
29-07-21	<p>Replanning the 19th-century industrial city: Haussmannism, the City Beautiful, social reform Ch. 6, in Peter Hall, <i>Cities Of Tomorrow</i> Boyer, Christine. 1983. <i>Dreaming the Rational City</i>. Cambridge, MA: MIT Press p. 59-82</p>
5-08-21	<p>The 19th century Industrial city in the colony McFarlane, Colin. 2008. <i>Governing the Contaminated City: Infrastructure and Sanitation in Colonial and Post-Colonial Bombay</i>. <i>International Journal of Urban and Regional Research</i> 32 (2): 415–435</p> <p>The world wars</p> <ul style="list-style-type: none"> • Kosambi, Meera. 1986. Chapters 3-4 <i>Bombay in Transition : The Growth and Social Ecology of a Colonial City, 1880-1980</i>, Stockholm, Sweden: Almqvist & Wiksell International • Cunningham, Susan. 1980. Brazilian cities old and new: Growth and Planning experiences in <i>Shaping an Urban World</i> eds. Gordon Cherry. Manseel, London
12-08-21	<p>Early 20th-Century founding blocks: The Garden City Movement Ch. 4, in Peter Hall, <i>Cities Of Tomorrow</i> Fishman, Robert. <i>Urban Utopias: Ebenezer Howard, Frank Lloyd Wright and Le Corbusier</i> in Scott Campbell & Susan S. Fainstein, ed., <i>Readings in Planning Theory</i></p>
19-08-21	<p>Early 20th-Century founding blocks: The Regional Planning Movement Meller, Helen. 1990. Chapter 7 & 8 in Patrick Geddes: <i>Social Evolutionist and City Planner</i> Ch. 5, in Peter Hall, <i>Cities Of Tomorrow</i></p> <p>Early 20th-Century founding blocks Ch. 7, in Peter Hall, <i>Cities Of Tomorrow</i></p>
02-09-21	<p>Establishment of urban and regional planning as a profession Benjamin, Gerald and Nathan, Richard. <i>Regionalism and Realism: A Study of Governments in the New York Metropolitan Area</i></p>
9-09-21	<p>History of Planning /– Post Independence (focus on Mumbai, various acts and institutions etc.) This lecture will look at the post-independence planning frameworks at the state level as well as the urban local body level. It will look at all the planning acts like the</p>

	MRTTP Act, Slum Act, institutions evolved for supplying affordable housing as well as the post liberalization institutions like RERA.
16-09-21	Development Plan Iterations: This lecture will focus on the Mumbai Development Plan as a Case Study, looking at the evolution of the three iterations of the Development Plan and the institutional framework in which they were created.
23-09-21	FSI, Transfer of Development Rights: This lecture will try to understand the various planning tools and techniques used in the Development Plan and the DCR to guide development of Mumbai. For eg: FSI, TDR, Zoning, CRZ, No Development Zone etc. There will also be a focus on the TDR tool used in the conservation of heritage structures.
30-09-21	Reading/Working session
7-10-21	Town Planning Schemes: This class will do a comparative analysis of the Town Planning Schemes implemented in Ahmedabad, Gujarat and Pune, Maharashtra
14-10-21	Transit Oriented Development: This class will look at the idea of the Transit Oriented Development and issues concerning its implementation in Mumbai along the Metro Corridor
21-10-21	Reading/Working session
28-10-21	Exam Study/Preparation
Reading & Discussion sessions	Students will be introduced to the readings pertaining to the next day lecture/class. Mandatory readings will be done in class and optional readings will be assigned for additional readings outside the class. Last 15 mins for discussion.

Assignment	
Assignment	An open book test will be conducted at the end of the course.

Optional Readings

- Kosambi, Meera. 1986. Chapters Introduction, 1-2 in *Bombay in Transition : The Growth and Social Ecology of a Colonial City, 1880-1980*, Stockholm, Sweden: Almqvist & Wiksell International (for Xerox)
- Krueckerberg, Donald A. 1983. The Culture of Planning in Kreuckerberg D.A., ed., Introduction to Planning History in the United States given
- Mehrotra, Rahul and Dwivedi, 2010. Sharada. *Bombay: Cities Within*, Chapters 1-4
- Richard Le Gates and Frederic Stout, eds. 2011. Frederick Law Olmsted, 'Public Parks and the Enlargement of Towns in The City Reader: Fifth Edition
- A.E.J. Morris, History of Urban Form Before the Industrial City p. 30-34; 59-70; 92-103; 157-168
- J.J.P. Oud: A Poetic Functionalist 1890-1963 - The Complete Works Hardcover by by Dolf Broekhuizen
- Singh, Binti (2018) *The Divided City: Ideological and Policy Contestations in Contemporary Urban India*, World Scientific Publishers, Singapore, Chapters 1 and 2
- Friedrich Engels, 1872 (1975 edition) "How the Bourgeoisie Solves the Housing Question" in *The Housing Question*, p. 40-74.
- Mike Davis. 2004. "Planet of Slums: Urban Involution and the Informal Proletariat" *New Left Review* 26, 5-34.
- King, Anthony. 1991. Chapter 3 in *Urbanism, Colonialism, and the World Economy, Cultural and Spatial Foundations of the World Urban System*. Routledge
- Ch. 1, in Anthony Sutcliffe, *Towards the planned city*

- Home, Robert. 1997. Miracle-worker to the people: The Idea of Town Planning (1910-1935) in *Of Planting and Planning: The Making of British Colonial Cities*.
- Ch. 4 (D. Rebentisch), in Gordon E. Cherry, ed., *Shaping an Urban World*
- Richard Le Gates and Frederic Stout, eds. 2011. Part 5, Chapters 2, 3 & 4 in *The City Reader: Fifth Edition*
- Meller, Helen. 1990. Introduction in Patrick Geddes: Social Evolutionist and City Planner
- Calthorpe, Peter and Fulton, William. Designing the Region and Designing the Region is Designing the Neighbourhood in Richard Le Gates and Frederic Stout. 2011. *The City Reader: Fifth Edition*.
- Perry, Clarence. The Neighbourhood Units in Richard Le Gates and Frederic Stout. 2011. *The City Reader: Fifth Edition*.
- Copenhagen <http://www.scribd.com/doc/99318840/Copenhagen-Regional-Plan-1947-Fingerplan-English-summary>

CO-PO mapped syllabi of Masters in Urban Design 2021-2022 – Planning Techniques and Procedures - I

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpret learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

Programme outcomes:

- To acquire the ability to critically understand the context
- To be able to recommend real and speculative urban propositions
- To be able to validate urban interventions with theoretical positions
- To be able to achieve technical competency for the respective streams
- To undertake research for production of new knowledge

Course: Planning Techniques and Procedures I

University Course Code: MUDC 103

Sem- 1

Year - First

KRVIA Course Code: UDP 633.1

Course Objectives:

- Critical evaluation of history and principles of planning in the international and national context
- Understanding of institutional and legal framework of planning at the national, state and city level
- Analyzing the application of planning techniques and approaches within different contexts and issues

Course Outcomes:

- Instilling the ability of the students to critically understand the process of creating planning as a technical profession.
- Making students aware the possibilities as well as limitations of different planning approaches through case studies.

- Ability of students to use an appropriate planning technique/approach based on a particular vision or goal.

USM's Kamla Raheja Vidyandhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task Assessment									
Grade	O++	O+	O	Excellent A	Very Good B	Good C	Fair D	Satisfactory E	Fail F
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
Area of Evaluation									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map , drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourcful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

CO-PO Mapping

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Instilling the ability of the students to critically understand the process of creating planning as a technical profession.	3	0	3	0	1
CO2	Making students aware the possibilities as well as limitations of different planning approaches through case studies.	3	3	2	2	1
CO3	Ability of students to use an appropriate planning technique/approach based on a particular vision or goal.	2	3	3	3	2

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation
 0 – No Correlation

Archaeology 2021-2022
Semester 1
Course Structure
Andre Baptista

Aims:

To highlight the inextricably intertwined relationship between the disciplines of architecture and archaeology by understanding ideas, thoughts and broad traditions of ancient peoples regarding man-land relationships, site catchment, settlement patterns, distribution and formal arrangement of buildings in the overall scheme of town planning.

Objectives:

- To introduce students to the fundamentals of Archaeological thought, reasoning and research.
- To enable students to comprehend the historical origins and significance of the process of Urbanization and the growth of Urban Centres
- To make students aware of the laws and statutes regulating the protection and preservation of Archaeological Monuments, Heritage Structures and Antiquities.

Methodology/methods of instructions:

The course will be taught through online classroom introductory and theoretical lectures and a possible visit to a protected archaeological monument and/or an archaeological site (situation permitting).

Learning outcomes:

Students will be taught archaeological site documentation to create a digital database, the mechanisms that drive culture and its expressions, spatial distribution of sites and networks that exist within them, archaeological site management with measured interventions for on-site education, knowledge dissemination and circulation patterns.

Research methodology will introduce students to the various approaches to be adopted when dealing with living and extinct cultural practices. Documentation and interpretations of sites visited will add to the existing knowledge database by means of publications in journals, edited volumes, books, etc.

**Kamla Raheja Vidyanidhi Institute of Architecture and Environmental Studies
J.V.P.D. Scheme, Juhu**

Course: M. Arch (Urban Conservation | Urban Design)

Elective: Archaeology

Faculty: Dr. André J.J. Baptista

Academic Year: 2021 – 2022

Syllabus:

Number	Duration	Topic	Day
1	90 mins	Orientation and Introduction to the Course – Content and Structure – What is Archaeology? Assignments and Submissions	Saturday – 08/01
2	90 mins	Archaeology – Aims, Definition and Scope	Saturday – 15/01
3	90 mins	Archaeology – A Timeline I (Pre and Proto-historic Cultures)	Saturday – 22/01
4	90 mins	Archaeology – A Timeline II (Early Historic and Medieval)	
5	90 mins	Historiography of Archaeology I (Pre-Independence)	Saturday – 29/01
6	90 mins	Historiography of Archaeology II (Post-Independence)	
7	90 mins	Field Archaeology I - (Exploration Methods)	Saturday – 05/02
8	90 mins	Field Archaeology II – (Excavation Methods)	
9	90 mins	Bassein Fort - A Virtual Tour through Photographs	Saturday – 12/02
10	90 mins	Heritage Laws and Statutes I	Saturday – 19/02
11	90 mins	Heritage Laws and Statutes II	
12	90 mins	Archaeology – Site Management	
13	90 mins	Urbanisation – Archaeological Perspectives	Saturday – 26/02
14	90 mins	Town Planning I and II (Proto-historic, Early Historic and Medieval)	
15	90 mins	Project Submissions* - Jury	Saturday – 05/03
16	90 mins	Reading Urban Spaces – An Ethno-Historical Approach with reference to Khotachiwadi – Space, Memory and Identity	Saturday – 12/03

*Project submissions will be based on group assignments involving drafting a heritage management plan for a site protected by the Archaeological Survey of India

CO-PO mapped syllabi of Master's in Architectural & Urban Conservation 2021-2022 – Archaeology

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

Programme outcomes:

1. To acquire the ability to critically understand the context.
2. To be able to recommend real and speculative urban propositions.
3. To be able to validate urban interventions with theoretical positions.
4. To be able to achieve technical competency for the respective streams.
5. To undertake research for production of new knowledge.

Course: Archaeology

University Course Code: C1C

Sem- 1

Year - First

KRVIA Course Code: UCA-622

Course Objectives:

1. To introduce the fundamentals of the archaeological thought, reasoning, and research as a general approach to conservations studies
2. To comprehend the historical significance and the processes of urbanisation and the development of urban centres through the lenses of man-land relationships, settlement patterns, site catchment, material technology, distribution, and formal arrangement of buildings in the overall scheme of town-planning.
3. To create scope for debate on the protection, conservation, preservation of archaeological sites, monuments, remains and antiquities, and heritage structures and precincts by dealing with relevant laws and statues and heritage policies.

Course Outcomes:

1. Sensitizing and building sensibilities around both tangible and intangible forms of culture to bolster conservation practice.
2. Enable students to critically evaluate the mechanisms that drive culture and its expression.
3. Experience with the process of Archaeological and heritage site management and proposal drafting.

USM's Kamla Raheja Vidyavidhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits			
Exercise: Title									
Exercise Note / Task Assessment									
Grade	O++	O+	O	Excellent A	Very Good B	Good C			
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%			
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0			
Area of Evaluation									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Weak. Based on biased hypothesis.	Not acceptable	
Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Not enough to support	Not acceptable	
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Not acceptable	
Presentation/ articulation, coherence and clarity of argument in the form of power-point, paper, map , drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

CO-PO Mapping:

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Sensitizing and building sensibilities around both tangible and intangible forms of culture to bolster conservation practice.	3	3	2	2	2
CO2	Enable students to critically evaluate the mechanisms that drive culture and its expression.	3	3	2	2	2
CO3	Experience with the process of Archaeological and heritage site management and proposal drafting.	3	3	3	2	1

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation
 0 – No Correlation

KRVIA Post Graduate Program 2021 - 22

SEM I | MODULE | URBAN DESIGN THEORY AND METHOD

Faculties: Manoj Parmar | Aaradhana

THEORY COURSE FORMAT: LECTURES 6 | STUDENT ASSIGNMENTS 2

COURSE FORMAT: FACULTY PRESENTATION | STUDENTS DRAWING ASSIGNMENTS

COURSE OBJECTIVES

- Reading of cities, representing of cities
- To familiarize the students with the influential urban design theories, principles, conceptual and physical models, analytical methods and drawings over the period, and explores critically the imperative that has caused the situation, their interrelationships, spheres of influence.
- Students will be able to: critically review and interpret key urban design texts, construct and present basic arguments, engage with key literature and other sources of knowledge; and use basic conceptual frameworks for Urban Design arguments.

SESSIONS		TOPICS TO BE COVERED
Lecture 1	16/12/2021	Introduction to the course and discussion on what is Urban Design Theory and its relevance to understanding of our cities.
Lecture 2	23/12/2021	What is Urban scape: Reading of Serial Vision and Imageability
Lecture 3	6/1/2022	What is Urban Morphology: Reading of Good City Form and City Assembled
Lecture 4	13/1/2022	Sacred Cities
Lecture 5	20/1/2022	Linkage and Network Theories: Reading of Finding Lost Space
Lecture 6	27/1/2022	Space Distribution & Urban Experience: Reading of Urban Theory and Urban
Lecture 7	11/2/2022	Collage City

ASSIGNMENTS: 50 Marks

ASSIGNMENT I	Morphology Drawings Group Assignment	25
ASSIGNMENT II	Network Drawings Group Assignment	25

CO-PO mapped syllabi of Masters in Architectural & Urban Conservation 2021-2022 – Theory and Methods of Urban Design (E1a)

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

Programme outcomes:

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

Course: Theory and Methods of Urban Design (E1a)

University Course Code: E1a

MUDC 102 Sem- 1 Year - First

KRVIA Course Code: UTH 622.1

Course Objectives:

1. To develop the method of reading and representing of cities through various types of drawings and narratives.
2. To familiarize the students with the influential urban design theories, principles, conceptual and physical models, analytical methods, and drawings over the period, and explores critically the imperative that has caused the situation, their interrelationships, and spheres of influence.
3. Students will be able to: critically review and interpret key urban design texts, construct and present basic arguments, engage with key literature and other sources of knowledge; and use basic conceptual frameworks for Urban Design arguments.

Course Outcomes (CO):

1. Develop an understanding of reading and representing cities through various urban theories 2.

Familiarize the students with the influential urban theories and explore critically the imperatives that have caused a situation, their interrelationships, and spheres of influence in the making of the city.

3. Critically assess and analyze important urban design theories, build and present basic arguments, and apply fundamental conceptual frameworks for urban design arguments.

Rubrics:

USM's Kamla Raheja Vidyandhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task									
Assessment Grade	O++	O+	O	Excellent A	Very Good B	Good C	Fair D	Satisfactory E	Fail F
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
Area of Evaluation									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map , drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

CO-PO Mapping:

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Develop an understanding of reading and representing cities through various urban theories	3	3	0	2	1
CO2	Familiarize the students with the influential urban theories and explore critically the imperatives that have caused a situation, their interrelationships, and spheres of influence in the making of the city.	3	3	3	2	1
CO3	Critically assess and analyze important urban design theories, build and present basic arguments, and apply fundamental conceptual frameworks for urban design arguments.	3	2	3	2	3

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation 0 – No Correlation

CONSERVATION TECHNIQUES AND PROCEDURES

KRVIA Masters:

Sem: I- 2021

MODULE: CONSERVATION TECHNIQUES AND PROCEDURES

THEORY COURSE FORMAT: LECTURES 16| STUDENT ASSIGNMENTS 2

COURSE FORMAT: FACULTY PRESENTATION | STUDENTS PRESENTATIONS & ASSIGNMENTS

AIM : The aim of this course is to understand and explore traditional knowledge systems embedded in our tangible and intangible cultural heritage. Under this framework, the students will be introduced to various conservation techniques related to traditional forms of tangible and intangible heritage, and will be encouraged to develop their own methods for mapping, analysing, communicating and interpreting these techniques.

COURSE OBJECTIVES:

- To introduce students to traditional built form, its techniques and materials.
- To introduce students to approaches in traditional knowledge systems and indigenous knowledge practices as part of our cultural heritage.
- To expose them to various building practices and procedures that involves craftsmanship and traditional methods of repair and maintenance.
- To explore various methods of documenting and critically analysing these conservation techniques and procedures of traditional built and intangible form.
- To discuss the various issues, challenges and opportunities in conservation practices.

METHODOLOGY AND METHOD OF INSTUCTION:

The course shall be conducted through a series of lectures, working studios and assignments. Through the lectures and presentations, various case studies shall be discussed, with the aid of adequate reading material.

LEARNING OUTCOMES : The students shall develop an understanding of contemporary approaches to traditional building forms and knowledge systems in our cultural heritage. The students will be

equipped with tools for analysing and mapping various conservation techniques and procedures on site.

FACULTY: APOORVA IYENGAR							
SUBJECT: ELECTIVE : 2 HRS per week							
METHOD:							
1	2	3	4	5	6	7	8
Lecture	Lecture	Lecture	Lecture	Lecture	Working Session	Working Session & Submission	Lecture
9	10	11	12	13	14	15	16
Lecture	Guest Lecture	Lecture	Lecture	Lecture	Working Session	Presentation and Discussion	Presentation and Discussion

SESSIONS	TOPICS TO BE COVERED
Lecture 1 2.12	Introduction to Conservation procedures and identifying traditional built forms
Lecture 2 9.12	Approaches to traditional knowledge systems within tangible and intangible cultural heritage
Lecture 3 16.12	Indigenous knowledge practices as living heritage
Lecture 4 23.12	Conservation Mapping Techniques - I
Lecture 5 6.01	Conservation Mapping Techniques - II
Lecture 6 13.01	WORKING SESSION (Each students does a short case study on a traditional knowledge system in a site and identifies the values and significance)
Lecture 7 20.01	WORKING SESSION AND SUBMISSION
Lecture 8 27.01	Building materials and traditional practices - I
Lecture 9 03.02	Building materials and traditional practices - II
Lecture 10 10.02	Conservation Science Techniques (Guest Lecture)
Lecture 11 17.02	Traditional methods of repair and maintenance - I
Lecture 12 23.02	Traditional methods of repair and maintenance - II
Lecture 13	Challenges in Conservation techniques

02.03	
Lecture 14 09.03	WORKING SESSION (Each student analyses a traditional knowledge system on a site, mapping it in detail and identifying its significance and challenges. Power point presentation.)
Lecture 15 16.03	PRESENTATION AND DISCUSSION
Lecture 16 23.03	PRESENTATION AND DISCUSSION

ASSIGNMENTS: 50 Marks

Assignment 1	Presentation Submission	20 marks
Assignment 2	Presentation Submission	30 marks

CO-PO mapped syllabi of Masters in Architectural & Urban Conservation 2021-2022

- Conservation Techniques and Procedures

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

Programme outcomes:

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

Course: Conservation Techniques and Procedures

University Course Code: ELB

Sem- 1

Year - First

KRVIA Course Code: UCT 622

Course Objectives:

- To introduce students to traditional built form, its techniques and materials.
- To introduce students to approaches in traditional knowledge systems and indigenous knowledge practices as part of our cultural heritage.
- To expose them to various building practices and procedures that involves craftsmanship and traditional methods of repair and maintenance.
- To explore various methods of documenting and critically analysing these conservation techniques and procedures of traditional built and intangible form.
- To introduce the various issues, challenges and opportunities in conservation practices.

Course Outcomes:

- Understanding contemporary approaches to traditional building forms and knowledge systems in our cultural heritage.
- Ability to identify and analyse traditional building forms and traditional practices
- Equipping the students with tools for mapping and representing various conservation techniques and procedures on site.

USM's Kamla Raheja Vidyandhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task Assessment									
Grade	O++	O+	O	Excellent	Very Good	Good	Fair	Satisfactory	Fail
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
Area of Evaluation									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak Based on biased hypothesis.	Not acceptable
Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Charity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map , drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

CO-PO Mapping

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Understanding contemporary approaches to traditional building forms and knowledge systems in our cultural heritage.	2	2	2	2	1
CO2	Ability to identify and analyse traditional building forms and traditional practices	3	2	2	3	1
CO3	Equipping the students with tools for mapping and representing various conservation techniques and procedures on site.	3	2	2	3	1

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation
 0 – No Correlation

Rubrics:

Unpacking Infrastructure

Module 1: Water

Infrastructure as Spectacle

The state of infrastructure of a city seems to represent the level of 'development' of the a city. As a result, large infrastructure projects have become emblematic of progress. Governments regularly construct these large scale spectacles that serve to position the city/country as a part of the global economy, as a place to attract investment. Often this tendency is far removed from the fundamental needs and desires of the communities they claim to serve. Infrastructural projects rather than enabling vectors of movement towards the democratic become instruments of oppression. Perhaps, it thus becomes important to unpack the term itself to be able to rediscover the ontological function of infrastructure itself.

Infrastructure as Substructure

Infrastructures are imagined as the sub-structures that enable movement towards a distant horizon of a 'better life'- an ambiguous and contested term. As a result the imaginations, nature and role of infrastructures and the movements they enable are inevitably bound up in these contestations. Whose movement do they enable? At what cost?

To 'infrastructure' is to provide the necessary scaffolding upon which we can fulfil our lives. These fulfilments range from the desire for education, work, health, homes, communication, trade among many other aspects. These are seen as the fundamental structural supports through which we access the better life. They are imagined to be enablers, and as enablers they are seen as underneath ("infra") the 'real city'.

Infrastructure as Entanglement

However, this simplistic binary collapses upon closer examination. The city itself can install be seen as an infrastructure that enables movement. It becomes a space that is claimed, negotiated, contested and moulded to enable movements. The simplistic binary of the sub and supra collapses and what we discover instead are deep and complex entanglements. To be able to act in the city is to engage with and within these entanglements.

Mapping Infrastructure

Acts of representation can help us see, analyse and disentangle some of these connections and overlaps. The First Semester Masters Studio attempts to introduce the students to these interconnections and help them evolve ways of capturing and communicating them through acts of Mapping and Representation. These can help us understand, analyse through abstraction and communicate the way infrastructure is imagined, built and accessed in the city.

There are four frameworks through which we will be attempting to delay the question of the infrastructural. They are:

Infrastructure as Scaffolding

These are the conceptual instruments that have been imagined by the city. They could include Financial, Organisational, Spatial, Political, Technological aspects.

Infrastructure as People

These are the societal affiliations and bonds that enable movements through support structures. They include Communities, Kinships

Infrastructure as Process

These are the practices of individuals or communities to access infrastructures, or to create them

They include Negotiations, Navigations, Rebellions

Infrastructure as Affect

This category is interested in the experience of infrastructures in the city and the meaning they carry. These could be Phenomenological or Semiological

Module 1: Water

The first module of the Unpacking Infrastructure Series will explore the phenomenon of Water in the city. It will identify different artefacts around the phenomenon. The students will then develop a framework of analysis through which they will discover the histories, networks and processes related to the artefact. After an intensive mapping exercise they will attempt to represent it as part of an Exhibition to be held at the end of the semester.

Date	Activity	Assignment	Grade
3 Jan 22	Introduction		
6 Jan 22	Studio Discussion		
10 Jan 22	Studio Discussion		
13 Jan 22	Studio Discussion		
17 Jan 22	Studio Discussion		
20 Jan 22	Studio Discussion	Discovery' - Site Studies and Concept	20%
24 Jan 22	Studio Discussion		
27 Jan 22	Studio Discussion		
31 Jan 22	First Review		
3 Feb 22	Studio Discussion		

Date	Activity	Assignment	Grade
7 Feb 22	Studio Discussion		
10 Feb 22	Studio Discussion		
14 Feb 22	Studio Discussion		
17 Feb 22	Studio Discussion	Mapping' First Draft of Representation	20%
21 Feb 22	Studio Discussion		
24 Feb 22	Second Review		
28 Feb 22	Studio Discussion		
3 Mar 22	Studio Discussion		
7 Mar 22	Studio Discussion		
10 Mar 22	Studio Discussion		
14 Mar 22	Studio Discussion	Analysis' Second Draft of Representation	20%
17 Mar 22	Studio Discussion		
21 Mar 22	Studio Discussion		
24 Mar 22	Studio Discussion		
28 Mar 22	Studio Discussion		
31 Mar 22	Third Review	Final Presentation	40%

CO-PO mapped syllabi of Masters in Urban Design Masters in Architectural & Urban Conservation 2021-2022 – Studio I

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

Programme outcomes:

1. To acquire the ability to critically understand the context.
2. To be able to recommend real and speculative urban propositions.
3. To be able to validate urban interventions with theoretical positions.
4. To be able to achieve technical competency for the respective streams.
5. To undertake research for production of new knowledge.

Course: Studio I

University Course Code: MUDES102/S1A

Sem- 1

Year - First

KRVIA Course Code: UDCS61212.1/UDCS-666

Course Objectives:

1. Mapping & documentation of an urban settlement/ form.
2. Tracing the historical evolution of the urban settlement/ geography/ forms.
3. Encourage critical thinking of theories and methods taught in other lecture courses.

Course Outcomes:

1. Objectivity in data collection and representation.
2. Intensive mapping and data collection on contemporary urban and developmental challenges.
3. Engaging with a morphological survey/ analysis through detailed studies of the urban realm.
4. Explore and innovate on alternative techniques of representation for these complex urban conditions.

USM's Kamla Raheja Vidyandhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task Assessment									
Grade	O++	O+	O	A	B	C	D	E	F
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
Area of Evaluation									
Site observations and ability to critically analyse the data gathered.	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
Rigour of data collection/collation/ and curation, for each stage	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of readings/ maps/ drawings/ case studies	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
Presentation/ representation or articulation, coherence and clarity of argument in the assigned/selected form/mode	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

CO-PO Mapping:

CO	PO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Objectivity in data collection and representation.	3	0	0	2	3
CO2	Intensive mapping and data collection on contemporary urban and developmental challenges.	3	0	0	2	3
CO3	Engaging with a morphological survey / analysis through detailed studies of the urban realm.	3	0	0	2	3
CO4	Explore and innovate on alternative techniques of representation for these complex urban conditions.	3	0	0	3	3

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation
 0 – No Correlation

SEM I 2021-22 – URBAN ECOLOGY AND NATURAL HERITAGE– 16 WEEKS

THEORY COURSE FORMAT: LECTURES 16| STUDENT ASSIGNMENTS -4

STUDIO FORMAT: STUDENTS PRESENTATION | CASE STUDIES | FACULTY PRESENTATION

University Course Code: SIB

PEDAGOGIC INTENT/COURSE OBJECTIVES:

Introduction to the field of Ecological Planning and to understand the basis for frameworks and legal categories for environment and landscape conservation.

- 1) To trace genealogies of the varied conceptions of nature through history which are instrumental in shaping frameworks for landscape conservation.
- 2) To provide students with a historical overview of environmental discourses and theoretical origins of the field of ecological planning
- 3) To understand the origins of the field of ecological planning: the theoretical framework, its principles, concepts methods and application.
- 4) To critically review policy and legal frameworks or categories employed for the conservation and management of landscapes.

COURSE METHODOLOGY:

The course comprises of a theory as well as a studio component. The course will be a lecture course interspersed with discussions on readings etc which will explore theoretical ideas and concepts and their genealogies. Case studies of ecological planning and the implications of various planning legislative and policy frameworks and their application will be discussed and analyzed. The studio component will involve a series of exercises and the application of the various analytical methods or tools which are introduced during the course.

- 1) Introduction to ideological origins , processes, methods and techniques of ecological mapping and analysis.
- 2) Introduction to genealogies of different conceptions of nature and the origin and evolution of concepts such as deep ecology, social ecology, sustainability etc.
- 3) Introduction to basic concepts in ecology. These include 1. Physical aspects such as geology, geomorphology and geomorphic units, terrain, physiography, slope and aspect, natural drainage and hydrology. 2. Biological aspects such as ecology, habitats and ecosystems, species, biodiversity, succession, resilience, climax, ecological niches, pioneer and keystone species, ecotones etc. 3. Related Concepts such as landscape types, landscape units, bio-geographic zones and bio-regions.
- 4) Introduction to values and criteria used for landscape assessment and help them understand concepts such as ecological or environmental significance, sensitivity, fragility and vulnerability.

LEARNING OUTCOMES

- 1 Students will understand the context, theoretical framework and methods of ecological planning.

- 2 Students will learn to apply ecological methods to analyse contemporary urban and infrastructure planning development in their own contexts .
- 3 Students will learn to critically evaluate frameworks or categories employed for the conservation and management of landscapes.

SESSIONS	DATE	TOPICS TO BE COVERED
Session 1	7 th January	Lecture/discussion: Introduction to Urban Ecology and Ecological Planning
Session 2	14 th January	Group exercise 1: The Crisis of Environment: Nature, Climate and the age of the Anthropocene
Session 3	21 st January	Lecture/discussion: Historical overview of environmental discourses and theoretical origin of the field of Ecological Planning
Session 4	28 th January	Film screening/ discussion: Conceptions of the Environment Lecture: The Environment as a Contested Domain
Session 5	4 th February	Group exercise 2: Student presentations of Case studies in Ecological Planning with a discussion on Theoretical Framework, Methods and Application
Session 6	11 th February	Lecture/ Discussion Basic Concepts in Ecology, Urban Ecology and Ecosystems
Session 7	18 th February	Lecture: Mapping Physical Aspects: Terrain, Geomorphology, Hydrology
Session 8	25 th February	Working studio and Review: Terrain Analysis
Session 9	4 th March	Lecture: Mapping Biological aspects: Vegetation, Ecosystems, Land-cover
Session 10	11 th March	Working Studio and Review: Land-cover Analysis
Session 11	18 th March	Lecture/Discussion: Planning Frameworks and Legal Categories
Session 12	25 th March	Working Studio:Analysis and Synthesis
Session 13	1 st April	Working Studio:Analysis and Synthesis
Session 14	8 th April	Prefinal review
Session 15	15 th April	Concluding Seminar: Analysis of regulatory frameworks
Session 16	22 nd April	Final Review and Submission of Studio Work

Assignment	
Assignment 1	Group assignment- Presentation by students based on selected readings
Assignment 2	Group assignment- Presentation by students on case studies in ecological planning
Assignment 3	Group assignment- Presentation by students on analysis of regulatory frameworks
Assignment 4	Group submission of studio exercise on ecological mapping and analysis

CO-PO mapped syllabi of Masters in Architectural & Urban Conservation 2021-2022 – Urban Ecology and Natural Heritage

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

Programme outcomes:

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

Course: Urban Ecology and Natural Heritage

University Course Code: SI B

Sem- I

Year - First

KRVIA Course Code: UCENH 666

Course Objectives

1. To trace genealogies of the varied conceptions of nature through history which are instrumental in shaping frameworks for landscape conservation.
2. To provide students with a historical overview of environmental discourses and theoretical origins of the field of ecological planning
3. To understand the origins of the field of ecological planning: the theoretical framework, its principles, concepts methods and application.
4. To critically review policy and legal frameworks or categories employed for the conservation and management of landscapes.

Course Outcomes (CO):

1. Students will understand the context, theoretical framework and methods of ecological planning.
2. Students will learn to apply ecological methods to analyse contemporary urban and infrastructure planning development in their own contexts .
3. Students will learn to critically evaluate frameworks or categories employed for the conservation and management of landscapes.

Rubrics:

USM's Kamla Raheja Vidyandhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task Assessment									
Grade	O++	O+	O	Excellent	Very Good	Good	Fair	Satisfactory	Fail
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
Area of Evaluation									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of readings, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map, drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

CO-PO Mapping:

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Students will understand the context, theoretical framework and methods of ecological planning.	3	0	0	2	0
CO2	Students will learn to apply ecological methods to analyse contemporary urban and infrastructure planning development in their own contexts .	3	2	2	3	3
CO3	Students will learn to critically evaluate frameworks or categories employed for the conservation and management of landscapes.	3	1	2	3	3

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation
0 – No Correlation

MODULE: CONSERVATION OF MODERN HERITAGE

THEORY COURSE FORMAT: SESSIONS 16 | STUDENT ASSIGNMENTS 1

STUDIO FORMAT: STUDENTS PRESENTATION | CASE STUDIES | FACULTY PRESENTATION

Aim

To introduce students to the concept of Modern Heritage which is ignored and not cared for and bring it within mainstream conservation discourse

Course Objectives

- To introduce students the importance of modern heritage, why it is important and why it needs to be preserved
- To initiate the understanding of modern heritage, its relevance through various examples of modern heritage around the world.
- Various approaches to Conservation of modern heritage via case studies

Methodology and Method of Instruction

The course shall be conducted in 4 broad modules and total of twelve lectures. The broad modules are as follows:

- Modern Heritage its importance and identification
- Conservation Approaches
- Case studies
- Material conservation

Learning Outcomes

The student shall be equipped with a better understanding of how listing process works. Be part of a real time research project along with professionals. Engage with site work. Champion the cause of Modern Heritage.

SESSIONS	TOPICS TO BE COVERED
Session 1 :01-12	Introduction. What is modern heritage? Different styles, periods, timeline
Session 2 : 08-12	Introduction to Identification, documentation & listing methods
Session 3 :15-12	Historic Thematic Approach to assess significance
Session 4 : 22-12	Introducing ICOMOS India Thematic study, listing proforma, processes and methodologies (NSC 20 C members)- Introduce the exercise
Session 5 : 05-01	Working session
Session 6 : 12-01	Historicity of Modern heritage-answering question of authenticity
Session 7 : 09-01	World Heritage & Modern Heritage
Session 8 : 02-02	Assessment and interpretation- Delft Lecture
Session 9 : 09-02	Case study-Chandigarh
Session 10 : 16-02	Working Session
Session 11 : 23-02	Material conservation 1 – Life span

Session 12 :02-03	Material conservation 2 - replacement vs repair
Session 13:09-03	Adaptive reuse and sustainability of 20 C buildings
Session 14: 16-03	Understanding modern landscapes
Session 15: 23-03	Working Session
Session 16: 30-03	Assignment review

Assignment	
Assignment 1	Identification and listing of 20 th century properties, individual buildings, or ensembles in Mumbai- Using ICOMOS India NSC 20 C template

CO-PO mapped syllabi of Master's in Architectural & Urban Conservation 2021-22 Conservation of Modern Heritage

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
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4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

Programme outcomes:

1. To acquire the ability to critically understand the context.
2. To be able to recommend real and speculative urban propositions.
3. To be able to validate urban interventions with theoretical positions.
4. To be able to achieve technical competency for the respective streams.
5. To undertake research for production of new knowledge.

Course: Conservation of Modern Heritage

University Course Code: -

Sem- 1

Year - First

KRVIA Course Code: USOM-622.7

Course Objectives:

1. To introduce students the importance of modern heritage, why it is important and why it needs to be preserved.
2. To initiate the understanding of modern heritage, its relevance through various examples of modern heritage around the world.
3. Various approaches to Conservation of modern heritage via case studies.

Course Outcomes:

1. The student shall be equipped with a better understanding of how listing process works.
2. Be part of a real time research project along with professionals and engage with site work.
3. Champion the cause of Modern Heritage.

USM's Kamla Raheja Vidyaniidhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
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Exercise Note / Task Assessment Grade									
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Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
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Area of Evaluation									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
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CO-PO Mapping:

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	The student shall be equipped with a better understanding of how listing process works.	3	3	1	1	3
CO2	Be part of a real time research project along with professionals and engage with site work.	3	3	3	3	3
CO3	Champion the cause of Modern Heritage.	3	3	3	3	3

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation
 0 – No Correlation

Semester II

Scheme of Teaching and Examinations

SCHEME OF TEACHING AND EXAMINATIONS

MASTER OF ARCHITECTURE (M.ARCH) URBAN CONSERVATION SEM II

	EXAM CONDUCTED BY COLLEGE	TEACHING SCHEME			
	Semester II	Lecture	Studio	Total	Credits
C2a	Conservation Science (Materials & Techniques)	3		3	3
C2b	Conservation Legislation	3		3	3
C2c	Research Methods	3		3	3
E2a	Structural Conservation	2		2	2
E2b	Cultural Landscape & Landcape & Intangible Heritage	2		2	2
S2a	Studio 2a: Structural & Condtion Analysis		8	8	8
S2b	Studio 2b: Specifications & Bill of Quantities		4	4	4
		13	12	25	25

SCHEME OF EXAMINATION SEMESTER II					
		EXAM SCHEME			
		Theory (Paper)	Sessional Work		Credits
Semester II			Internal	External Viva	
C2a	Conservation Science (Materials & Techniques)	50	50		100
C2b	Conservation Legislation	50	50		100
C2c	Research Methods		100		100
E2a	Structural Conservation		50		50
E2b	Cultural Landscape & Landcape & Intangible Heritage		50		50
S2a	Studio 2a: Structural & Condtion Analysis		400		400
S2b	Studio 2b: Specifications & Bill of Quantities		200		200
	TOTAL	100	900		1000

URBAN CONSERVATION

2021-22

Semester II

PG sem 2 4th April - 15 June 2022		MONDAY	TUESDAY	WEDNESDAY
	8.00 - 8.50	Structural Conservation & Conservation Science (UC) Vikram, Apoorva 8-12	Studio II (UD +UC) Paul Shweta Ketaki Vikram Aradhana Aditya Ainsley 8-11	Cultural Exp Along S (U Sanaeya 8-
	8.50 - 9.40			
	9.40 - 10.30			
	10.30 - 11.20			
				Specificat (U San 10.30
	12.00-12.50	Structural Conservation & Conservation Science	Data Urbanism (UD +UC) Paul, Ankush 11.20-12.50	Specificat
	12.50 - 1.20			
1.20 - 2.10	Elective - I (UD +UC) Karan/Aradhana/Vikram	Planning Techniques & Procedure II (UD) Binti, Aditya	Conservatio (U Apo	
2.10 - 3.00				

Semester II

Time-Table

WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Press-Heritage Silk route (UC) Apoorva 8-10	Research Method (UD +UC) Binti, Sarah, Ketaki, Ginella 8-10	Studio II (UD +UC) Paul Shweta Ketaki Vikram Aradhana Aditya Ainsley 8-11	
Design & BOQ (UC) Aya 10.30-12.30	Transportation & Traffic for Urban Design (UD) Shuchi, Ankush 10.30-12.30		
BREAK			
Design & BOQ	Transportation & Traffic for Urban Design	Cultural Landscape & Intangible Heritage (UD +UC) Shweta 11.20-12.50	
LUNCHBREAK			
Urban Legislation (UC) Apoorva	Working Studio	UD theory II (UD) Paul	

Urban Design
 Choice Elective I: Data Urbanism
 Choice Elective II: Urban Design Theory II

KRVIA Masters:

Sem: II- 2022

MODULE: Urban Conservation-

THEORY COURSE FORMAT: LECTURES 8 | STUDENT ASSIGNMENTS 3

COURSE FORMAT: FACULTY PRESENTATION | STUDENTS ASSIGNMENTS

AIM:

To inculcate a scientific temperament in diagnosing the health of built heritage and initiate them into a methodical approach towards its retrofits and conservation.

COURSE OBJECTIVES

- **To inculcate an ability to understand the structural components of built heritage and recognise tell tale signs of stress through visual observations and deductions.**
- **to inculcate an approach of scientific enquiry with respect to the materials of a built heritage; properties, weathering patterns, deterioration, cleaning, consolidation and maintenance.**
- **To impart condition mapping and analysis skills.**
- **To initiate students in the art and science of repair and retrofits of old buildings especially the ones of heritage value.**

Learning Outcomes:

Skills of condition mapping and analysis of its causes.

Introduce the on site and Laboratory tests for detailed investigations

Speculating possible interventions, retrofits based on condition mapping and analysis.

AIM:

To inculcate a scientific temperament in investigating structural health of built heritage and initiate methodical approaches towards retrofits and conservation.

COURSE OBJECTIVES

- **To inculcate an ability to understand the structural components of built heritage and recognise tell tale signs of stress through visual observations and deductions.**

- To identify further structural investigations through on site observations, modelling and case examples.
- To initiate students in the art and science repairs and retrofits of old buildings especially the ones of heritage value.

Learning Outcomes:

Skills of mapping tell tale signs of structural vulnerabilities, further investigations and analysis of its causes.

Learning about the on site and Laboratory tests for detailed investigations

Learning through case examples, possible interventions, retrofits based on condition mapping and analysis.

FACULTY: Vikram Pawar, Apoorva Iyengar						
SUBJECT: Conservation Science/ Structural Conservation : 2+2=4 HRS						
METHOD: Lectures & Studio. The 4 hour session will be conducted as lectures and studio as given below. For studio, a pair of students (the eleventh student will be handling a project alone) will be given base drawings of a Heritage structure along with the photographs. Under faculty guidance, students are expected to prepare models/ detail drawings; query the data received (drawings, List card information and photographs); make observations and analyse the conditions mapped while relating the observations with the lecture sessions. The course is specially designed for the truncated format of the semester on account of Covid and focusses on the bare essentials as expected in the practice. An additional commitments of 4 hours per week (minimum) is expected from the students beyond the scheduled sessions.						

	SESSIONS	TOPICS TO BE COVERED	Speakers
Week 1	Lecture 1 a	Introduction:	Apoorva
4.04	Lecture 1 b	Materials, Interrelationships and Systems; Ageing & Decay; Weathering, Environmental Factors	Vikram
	Studio 1	Introduction to the exercise	Apoorva
	Lecture 2 a	Condition Mapping- Looking for Geotechnical factors	Vikram
	Lecture 2 b	Condition Mapping- Looking for vulnerabilities above ground	Apoorva
Week 2	Lecture 3a	Built Heritage and Natural Elements	Vikram
11.04	Lecture 3b	Structural Failures- Case Examples & Causes	Apoorva
	Studio 2	Review of the base drawings	Vikram/ Apoorva

Week 3	Lecture 4a	Structural Concepts- Load bearing/ Composite	Apoorva
18.04	Lecture 4b	Materials & Systems- Mud, Stones, Clay products, Concrete & Mortars	Vikram
	Studio 3	Strip sections (1st grading)	Vikram/ Apoorva
Week 4	Lecture 5a	Tell tale signs of structural stress part 1- Case studies	Vikram/ Ainsley???
25.04	Lecture 5b	Tell tale signs of structural stress part 2-- Case studies	Apoorva
	Studio 4	Condition mapping over base drawings	Vikram/ Apoorva
Week 5	Lecture 6a	Structural Concepts- Composite/ Frame Structures	Vikram
2.05	Lecture 6b	Materials & Systems Timber and Bamboo-, Reinforced Concrete (Modern Heritage)	Vikram
	Studio 5	Analysis and Vulnerability assessment (2nd grading)	Vikram/ Apoorva
Week 6	Lecture 7a	Metals- Cast Iron/ Steel	Vikram
9.05	Lecture 7b	Metals- Non Ferrous	Apoorva
	Studio 6	Repair/ Retrofit/ Further investigations/ Recommendations	Vikram/ Apoorva
Week 7	Lecture 8a	Wall finishes, Paintings and	Vikram
23.05	Studio 7	Review	Vikram/ Apoorva
Week 8	Lecture 9	Gilding, Stain Glass-	Apoorva
30.05	Studio 8	Review/ Working studio	Vikram/ Apoorva
Week 9	Studio 9	Review/ Working studio	Vikram/ Apoorva
6.06			
Week 10	Studio 10	Final submission (3rd grading)	Vikram/ Apoorva
13.06			

ASSIGNMENTS: 50 Marks for Conservation Science (CS) and 50 Marks for Structural Conservation (SC)

		CS	SC
1	Studio- Building documentation	20	15
2	Studio- Condition Mapping & Analysis	15	20
3	Studio- Repair/ Retrofit Recommendations	15	15

Reading list

1. Bais Sangeeta; Why Use Lime?
2. Feilden Bernard; Conservation of Historic Buildings
3. Feilden Bernard; Guidelines for conservation, A technical Manual
4. May Eric, Jones Mark; Conservation Science- Heritage Materials
5. Marshall John; Conservation Manual: A handbook for the use of Archaeologists
6. Kuriakose Benny; Conservation Briefs: Conservation Timber Structures in India
7. Rai Gurmeet S, Desarkar Paromita; What are Lime Mortars.
8. ICOMOS Charters
9. Journal of Research in Architecture & Planning: Conservation of Cultural Heritage

CO-PO mapped syllabi of Masters in Architectural & Urban Conservation 2021-22 – Conservation Science

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpret learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

Programme outcomes:

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

Course: Conservation Science

University Course Code: C2A

Sem- 2

Year - First

KRVIA Course Code: UCS 633

Course Outcomes:

- Analytical comprehension of condition mapping and its causes.
- Ability to identify tell tale signs of vulnerability.
- Comprehension of material conservation
- Awareness of on site and Laboratory tests for detailed investigations
- Speculating abilities for possible interventions, retrofits based on condition mapping and analysis.

USM's Kamla Raheja Vidyandhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task Assessment Grade									
Percentage	O++	O+	O	A	B	C	D	E	F
Equivalent out of 10.0	90% and above 9.0	80% 8.0	79% - 75% 7.9 - 7.5	74% - 70% 7.5 - 7.0	69% - 65% 6.9 - 6.5	64% - 60% 6.4 - 6.0	59% - 55% 5.9 - 5.5	54% - 50% 5.4 - 5.0	49% - 40% 4.9 - 3.0
Area of Evaluation									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map , drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

CO-PO Mapping:

	CO	PO1: Critical underst anding of context	PO2: Urban proposit ioning	PO3: urban intervent ions with theoretic al positions	PO4: Technic al Compet ency	PO5: Creatio n of new knowle dge
CO1	Analytical comprehension of condition mapping and its causes.	3	1	2	3	1
CO2	Ability to identify tell tale signs of vulnerability.	3	1	2	3	1
CO3	Comprehension of material conservation	3	1	2	3	2
CO4	Awareness of on site and Laboratory tests for detailed investigations	3	1	1	3	2
CO5	Speculating abilities for possible interventions, retrofits based on condition mapping and analysis.	3	2	2	3	3

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation
0 – No Correlation

COURSE CODE	UCCL 663	CREDITS	3
COURSE NAME	Conservation Legislation	SESSIONAL MARKS	100
FACULTY	Apoorva Iyengar	EXAM SCHEME	External
TIME	1.20-3pm	NON-CLASS TIME	-

PEDAGOGIC INTENT:

- The intent of the course is to introduce the students to all the prevailing bylaws/ policies in the city of Mumbai as well as the country directly affecting, negatively or positively the world of Architectural & Urban Conservation
- The objective is to train the students towards understanding the applicability of the bylaws and to take critical standpoints.
- The course also helps critique certain policies in dire need of amendments in the country and their prevalent impacts.

COURSE METHODOLOGY: The course will be conducted through a series of lectures, with case-study based applications and discussions with students.

LECT	DATE	TEACHING CONTENT
1	10.05	Introduction to Conservation Legislation and Need for Conservation Legislations. Protected and Unprotected heritage /Listing of heritage buildings and sites by INTACH
2	17.05	The DCR 67: Discussions about the Heritage regulations for Greater Bombay 1995 and its loop holes. And The LEASE Policy, Old Bombay Lease Policies and Examples of Fort area buildings
3	24.05	The AMASR Act- Indian Heritage Legislation Laws required towards implementation of AMASR act 1958/ The Ancient Monuments and Archaeological Sites and Remains Rules of 1959; Gazette Notifications/ NMA
4	31.05	The Rent Control/ CESS Acts
5	06.06	DCR 33 with all its sub regulations
6	13.06	Introduction to Heritage Impact Assessment and The CRZ Regulations (old & revisions)
7	21.06	Agencies in the formulation of the byelaws in the city and Working Studio
8	28.06	Student Presentations

LEARNING OUTCOMES: Through the course, the students should be able to look at their own sites during thesis and design studios with aspects of fiscal policies, alteration of redundant byelaws and framing policy guidelines for their sites for the future.

The course encourages the importance of policymaking and guidelines in the field of Urban Conservation- making policies a tool for better management urban precincts

READING LIST/REFERENCES:

1. Chainani Shyam; Legislative & Organizational Policies for India, INTACH
 2. The Rent Control Act
 3. The Lease Act
 4. Urban Development Department Bombay; Heritage Regulations for Greater Bombay 1995
 5. AMASR Act, 1958
 6. CESS Act & DCR 33
-

CO-PO mapped syllabi of Masters in Architectural & Urban Conservation 2021-2022 – Conservation Legislation

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
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2. To be able to recommend real and speculative urban propositions
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5. To undertake research for production of new knowledge

Course: Conservation Legislation

University Course Code: C2B

Sem- 2

Year - First

KRVIA Course Code: UCCL 663

Course Objectives:

- To introduce the students to all the prevailing bylaws/ policies in the city of Mumbai as well as the country directly affecting, negatively or positively the world of Architectural & Urban Conservation
- To train the students towards understanding the applicability of the bylaws and to take critical standpoints.
- To help them critique certain policies, identify their benefits and shortcomings, and relook at the policies in dire need of amendments in the country and their prevalent impacts.

Course Outcomes:

- Understanding the importance of policymaking and guidelines in the field of Urban Conservation.
- Ability to critique policies - identify their benefits and shortcomings and form a standpoint of their own.
- Ability to understand how policies and regulations can be used as a tool for better management of urban precincts.

USM's Kamla Raheja Vidyamidhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task									
Assessment Grade	O++	O+	O	A	B	C	D	E	F
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
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CO-PO Mapping

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Understanding the importance of policymaking and guidelines in the field of Urban Conservation	3	3	1	1	1
CO2	Ability to critique policies - identify their benefits and shortcomings and form a standpoint of their own.	3	3	2	2	1
CO3	Ability to understand how policies and regulations can be used as a tool for better management of urban precincts.	3	3	2	2	1

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C2c	COURSE NAME	Research Methods (Urban Conservation)		SEMESTER	II	CREDITS	3
	FACULTY	Ginella George, Sarah George, Dr. Binti Singh, Ketaki Tare		SESSIONAL MARKS	100	SCHEME OF EXAMINATION	Internal
	TIME	Thursday : 8 am to 10:30 am		TEACHING HOURS	2h 30m	TIME REQUIRED OUTSIDE OF CLASS	-
UNIVERSITY COURSE DESCRIPTION	1. Research Question and Enquiry and 2. Research Writing - Structure, Citations and Referencing						
PEDAGOGIC INTENT	The course will help to understand the criteria and components that make a theoretical framework for assessing and interpreting urban processes.						
METHODOLOGY	1) The course is structured around reading, reviewing and analysing different concepts that have emerged around the city. 2) Faculty will engage with the students through lectures and discussions that will focus on enhancing research design skills.						
SCHEDULE	DAY	DATE	TEACHING CONTENT OF THE DAY	MARKING DISTRIBUTION	ASSIGNMENT/DELIVERABLE		
week 1	Thursday	7.4.2022	Introduction to the course What is Knowledge? Ways and Methods of Knowing, Difference between Fact, Belief, Opinion and Bias				
week 2	Thursday	14.4.2022	The Global City: Presentation by Group 1 on assigned readings Class Discussion				
week 3	Thursday	21.4.2022	The Digital City: Presentation by Group 2 on assigned readings Class Discussion				
week 4	Thursday	28.4.2022	The Sustainable City: Presentation by Group 3 on assigned readings Class Discussion				
week 5	Thursday	5.5.2022	The Inclusive City: Presentation by Group 4 on assigned readings Class Discussion				
week 6	Thursday	12.5.2022	The Gendered City: Presentation by Group 5 on assigned readings Class Discussion				
week 7	Thursday	2.6.2022	The Informal City: Presentation by Group 6 on assigned readings Class Discussion				
week 8	Thursday	9.6.2022	Presentation by students on proposed thesis topics: Discussions and directions for future research				
EVALUATION CRITERIA	Individual/ Group based presentations and class assignments						
LEARNING OUTCOMES	Exploring insights around urban perspectives and critically examining contemporary issues and developments will enable students in framing their own independent arguments and 2.Choosing appropriate methods in the process of data collection						
READING LIST	1. The Sage Handbook of Qualitative Research by Norman K. Denzin and Yvonna S. Lincoln 2. The City Reader, Edited by Richard T. LeGates and Frederic Stout						

KRVIA Masters:

Sem: II- 2022

MODULE: Urban Conservation-

THEORY COURSE FORMAT: LECTURES 8| STUDENT ASSIGNMENTS 3

COURSE FORMAT: FACULTY PRESENTATION | STUDENTS ASSIGNMENTS

AIM:

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Learning Outcomes:

Skills of condition mapping and analysis of its causes.

Introduce the on site and Laboratory tests for detailed investigations

Speculating possible interventions, retrofits based on condition mapping and analysis.

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Skills of mapping tell tale signs of structural vulnerabilities, further investigations and analysis of its causes.

Learning about the on site and Laboratory tests for detailed investigations

Learning through case examples, possible interventions, retrofits based on condition mapping and analysis.

FACULTY: Vikram Pawar, Apoorva Iyengar						
SUBJECT: Conservation Science/ Structural Conservation : 2+2=4 HRS						
METHOD: Lectures & Studio. The 4 hour session will be conducted as lectures and studio as given below. For studio, a pair of students (the eleventh student will be handling a project alone) will be given base drawings of a Heritage structure along with the photographs. Under faculty guidance, students are expected to prepare models/ detail drawings; query the data received (drawings, List card information and photographs); make observations and analyse the conditions mapped while relating the observations with the lecture sessions. The course is specially designed for the truncated format of the semester on account of Covid and focusses on the bare essentials as expected in the practice. An additional commitments of 4 hours per week (minimum) is expected from the students beyond the scheduled sessions.						

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Week 9	Studio 9	Review/ Working studio	Vikram/ Apoorva
6.06			
Week 10	Studio 10	Final submission (3rd grading)	Vikram/ Apoorva
13.06			

ASSIGNMENTS: 50 Marks for Conservation Science (CS) and 50 Marks for Structural Conservation (SC)

		CS	SC
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Course: Structural Conservation

University Course Code: E2A

Sem- 2

Year - First

KRVIA Course Code: UCSC 622

Course Outcomes:

- Comprehension of structural vulnerabilities through visual observation and tell tale signs.
- Ability to visualise and represent the structure and its force paths.
- Awareness of on site and Laboratory tests for detailed structural analysis and investigations
- Comprehension of sequences leading to structural failures.
- Ability to comprehend intervention strategies and speculate retrofits based on structural modelling, condition mapping and analysis.

CO-PO Mapping:

	CO	PO1: Critical understa nding of context	PO2: Urban propositi oning	PO3: urban interventi ons with theoretic al positions	PO4: Technica l Compet ency	PO5: Creation of new knowled ge
CO1	Comprehension of structural vulnerabilities through visual observation and tell tale signs.	3	1	1	3	1
CO2	Ability to visualise and represent the structure and its force paths.	3	1	1	3	1
CO3	Awareness of on site and Laboratory tests for detailed structural analysis and investigations	3	1	1	3	1
CO4	Comprehension of sequences leading to structural failures.	3	1	1	3	2
CO5	Ability to comprehend intervention strategies and speculate retrofits based on structural modelling, condition mapping and analysis.	3	2	2	3	3

USM's Kamla Raheja Vidyamidhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
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Exercise Note / Task									
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Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map , drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

COURSE CODE	E2B	CREDITS	2
COURSE NAME	Cultural landscape and Intangible Heritage	SESSIONAL MARKS	
FACULTY	Shweta Wagh	EXAM SCHEME	Internal
CLASS DAY/TIME	2	NON-CLASS TIME	2

PEDAGOGIC INTENT

The practice of Conservation has seen a shift from scientific, specialised and expert oriented approaches to people centric and rights based approaches. In recent years concepts such as cultural landscapes and mixed heritage sites have been gaining increasing significance in the realm of heritage conservation. Originally conceptualised to bridge the nature- culture divide, the incorporation of these frameworks within heritage conservation discourses has broadened the scope of inventories and research activities. Today one sees the incorporation of several new categories based on the landscape framework in the fields of natural and cultural conservation.

This course will attempt define and investigate the meaning of the term landscape and its various applications. It will attempt to trace the historical origins of landscape frameworks for natural and cultural conservation. Landscape is a term with multiple meanings and connotations. Through an analysis of relevant case studies the course will critically examine the introduction and assimilation of this concept within the discourse of heritage conservation and its incorporation into conservation management and policy frameworks. Through an understanding of the application of this theoretical framework, the course will attempt to trace the relation between discourse and practice.

- To introduce the concepts of nature-culture linkages and intangible cultural heritage in the realm of conservation
- To introduce students to the various frameworks and categories that have emerged in the domains of natural and cultural conservation to address the issue of nature culture linkages.
- To redefine methods and approaches, broaden the scope of inventories, and tools for heritage management
- To introduce the students to practical applications of these framework through a series of case studies which will encompass a number of varied contexts
- To look at the various conventions and institutional bodies concerned with nature and cultural conservation, their overlapping domains, the limitations of existing policy frameworks, and problems with implementation.

COURSE METHODOLOGY

1. Lectures by the faculty to introduce definitions and categories and conceptual frameworks
2. Preparation of a timeline of the various conceptions, categories and policy frameworks related to nature-culture linkages in conversation which have emerged in the disciplines of nature and culture conservation.
3. Presentation of case studies by faculty and students: Various case studies will be analyzed and discussed to understand the issues and concerns regarding the protection and management of heritage sites.

LECT	DATE	TEACHING CONTENT
1	8 th April	Introduction to Landscape and Cultural landscapes: concepts, definitions and meanings
2	22 nd April	A historical evolution of Theoretical frameworks and perspectives
3	29 th April	Preparation of a timeline of the various conceptions, categories and policy frameworks related to nature-culture linkages in conversation
4	6 th May	Examining the notion of Cultural landscape: Linking Nature and Culture in Conservation
5	13 th May	Discourses related to Rights Based and People Centric Approaches to Conservation
6	20 th May	A Historical Overview of Policies and Frameworks for Conservation of Landscapes and Intangible Heritage
7	27 th May	A Historical Overview of Policies and Frameworks for Conservation of Landscapes and Intangible Heritage
8	3 rd June	Case studies on issues concerning the protection and management of Heritage Sites (Natural sites, mixed sites, associative landscapes)
9	10 th June	Case studies on issues concerning the protection and management of Heritage Sites (Indigenous, agrarian, traditional Landscapes)

LEARNING OUTCOMES

1. Students will learn and comprehend concept of nature-culture linkages in conservation.
2. Students will understand frameworks and categories concerned with nature-culture linkages
3. Students will comprehend the scope and application of landscape frameworks in conservation

**READING LIST/
REFERENCES**

- Ishizawa, Maya, Inaba, Nobuku and Yoshida Masahito, (eds.), Proceedings of the First Capacity Building Workshop on Nature-Culture Linkages in Heritage Conservation in Asia and the Pacific (CBWNCL 2016). Agricultural Landscapes, Journal of World Heritage Studies, University of Tsukuba, Japan.
- World heritage Committee, 2008, -Operational guidelines for the implementation of the World heritage Convention, UNESCO World Heritage Centre
- Taylor, Ken, and Jane Lennon, eds. 2012. Managing Cultural Landscapes. London ; New York: Routledge.
- UNESCO WHC. 2005. Operational Guidelines for the Implementation of the World Heritage Convention. Unesco World Heritage Centre.
- Verschuuren, Bas, Robert Wild, Jeffrey Mcneely, and Gonzalo Oviedo, eds. 2010. Sacred Natural Sites: Conserving Nature and Culture. London ; Washington, D.C: Routledge.
- Glendinning, Miles. (2013) The Conservation movement, a history of architectural conservation. Routledge, Oxon and New York
- Chainani Shyam: Heritage and Environment-An Indian Diary
- Samuel, Raphael. (2008) in Graham Fairclough et al ed The Heritage Reader, Routledge

**CO-PO mapped syllabi of Masters in Architectural & Urban Conservation 2020-2021
– Cultural Landscape and Intangible Heritage (UC)**

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

Programme outcomes:

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

Course: Cultural Landscape and Intangible Heritage

University Course Code: E2B

Sem- II

Year - First

KRVIA Course Code: UCCL 622

Course Objectives:

1. To introduce the concepts of nature-culture linkages and intangible cultural heritage in the realm of conservation
2. To introduce students to the various frameworks and categories that have emerged in the domains of natural and cultural conservation to address the issue of nature culture linkages.
3. To redefine methods and approaches, broaden the scope of inventories, and tools for heritage management
4. To introduce the students to practical applications of these framework through a series of case studies which will encompass a number of varied contexts
5. To look at the various conventions and institutional bodies concerned with nature and cultural conservation, their overlapping domains, the limitations of existing policy frameworks, and problems with implementation.

Course Outcomes (CO):

1. Students will learn and comprehend concept of nature-culture linkages in conservation.
2. Students will understand frameworks and categories concerned with nature-culture linkages
3. Students will comprehend the scope and application of landscape frameworks in conservation

Rubrics:

USM's Kamla Raheja Vidyandih Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task Assessment									
Grade	O++	O+	O	A	B	C	D	E	F
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
Area of Evaluation									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair. Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
Rigour of data collection/collation/ and curation. for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map , drawing or report	Exceptional	Impressive	Highly structured persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

CO-PO Mapping:

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Students will learn and comprehend concept of nature-culture linkages in conservation.	3	0	3	1	3
CO2	Students will understand frameworks and categories concerned with nature-culture linkages	3	1	3	3	2
CO3	Students will comprehend the scope and application of landscape frameworks in conservation	2	2	2	3	1

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation
 0 – No Correlation

Infrastructural Urbanism

Exploring the urbanism along the new Metro Corridors of Mumbai

M.Arch UD + UC, Sem 2, 2022

Studio Faculty - Aneerudha Paul, Ainsley Lewis, vikram pawar , Shweta Wagh , Ketaki Bhadgaonkar, Aditya Sawant and Aradhana Paralikar .

Introduction

The urban infrastructure networks, with their complex network architectures, work to bring heterogeneous places, people, buildings and urban elements into dynamic relationships and exchanges which would not otherwise be possible (Graham & Marvin, 2001).

The cities are witnessing growth of population densities resulting in the spread of the urban fabric, creating a demand for a rapid connectivity by the means of new transit systems. The studio intends to explore the dynamic relationships established as a result of introduction of a new transit network in a city fabric. The attempt would be to understand the causative forces of transformation in the immediate context of the urban blocks where the transit stations are inserted. The new network often creates development pressures due to increase in real estate values, increase in the population densities, floating population, changes in urban form, social fragmentation, etc. The students will attempt to understand these complexities and explore the role of urban design and conservation in the development process.

As a part of this process, the students will identify multiple nodes that are vulnerable to urban development pressures along the metro rail network that is under construction in the city of Mumbai. The intent is to study each node in detail with an attempt to assess the impact of the metro corridor/stations on the urban area in consultation with the various community groups and stakeholders. The studio will culminate in the form of design propositions including urban structure, control, guidelines, building scenarios and other mechanisms. The resolutions are expected to address all issues from conception to realization.

Schedule of the project:

Date	Day	Submissions/Lectures
11th April	Monday	8.00 am to 9.00 am - Lecture by Shweta and Hussain 9.00 am to 10.00 am - Lecture by Aneerudha Paul 10.00 am to 11.00 am - Lecture by Nitin Killawala Followed by Introduction to the studio project + Formation of groups
12th April	Tuesday	8.00 am onwards - Site visit metro corridor Northern leg
13th April	Wednesday	7.30 am onwards - Site visit metro corridor Southern leg
19th April	Tuesday	A1 Panel 1 no. - Individual response based on the site visit (Individual work) A1 Panel 1 no. - Group's regional study of the metro corridor + justification and finalization of nodes to be studied in the detail (group work) Lecture by Studio Faculty - 1 hour
22nd April	Friday	Studio Discussion
26th April	Tuesday	Lecture by Studio Faculty - 1 hour Studio discussion
29th April	Friday	Studio Discussion
3rd May	Tuesday	Lecture by Studio Faculty - 1 hour Studio discussion
6th May	Friday	A0 Panel 2 nos. - Presentation of the study of node + model (Group work)
10th May	Tuesday	Lecture by Studio Faculty - 1 hour Studio discussion
13th May	Friday	A1 Panel 1 no. - Individual response on the node + vision + argument (Individual work)
17th May	Tuesday	Lecture by Studio Faculty - 1 hour Studio discussion
20th May	Friday	A0 Panel 2 nos. - Presentation of the possible individual propositions + strategies + concept design plan for the node (individual work)
21st May - 31st May		Holiday
3rd June	Friday	Studio Discussion
6th June	Tuesday	Studio Discussion

10th June	Friday	Studio Discussion
13th June	Tuesday	A0 Panel 2 nos. - Pre Final review - Presentation of the individual propositions with models.
17th June	Friday	Work on representation of panels and model
21st June	Tuesday	Work on representation of panels and model
24th June	Friday	FINAL REVIEW

CO-PO mapped syllabi of Masters in Architectural & Urban Conservation 2021-2022 – Design Studio A

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

Programme outcomes:

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

Course: Studio II

University Course Code: MUDES202/S2A Sem- 2 Year - First

KRVIA Course Code: UDCS61212.2/UDCS-688

Programme outcomes:

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

Course Objectives:

- Situation analysis at neighbourhood and /or precinct/ heritage zone level.
- Detail investigations, surveys, and analysis for condition assessment of resources.
- Engage with various stakeholders including agencies, communities etc. and learn to communicate with them.

Course Outcomes:

- Objectivity in data collection and assessment.
- Devise pragmatic and localized programmatic strategies on complex urban issues.
- The outcome is imagined as a practice orientation to the studio.
- Learn to formulate urban intervention possibilities through a process of continuous interaction with these stakeholders.

Assessment	O++	O+	Outstanding	Excellent	Very Good	Good	Fair	Satisfactory	Fail
Grade	O++	O+	O	A	B	C	D	E	F
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
Area of Evaluation									
Site observations and ability to critically analyse the data gathered.	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair. Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
Rigour of data collection/collation/ and curation, for each	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of readings/ maps/ drawings/ case studies	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
Presentation/ representation or articulation, coherence and clarity of argument in the assigned/selected form/ mode	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

CO-PO Mapping

	CO	PO1: Critical understandi ng of context	PO2: Urban proposition ing	PO3: urban interventi ons with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledg e
CO 1	Objectivity in data collection and assessment.	3	2	2	1	2
CO 2	Devise pragmatic and localized programmatic strategies on complex urban issue.	2	2	2	2	2
CO 3	The outcome is imagined as a practice orientation to the studio.	2	1	3	2	2
CO 4	Learn to formulate urban intervention possibilities through a process of continuous interaction with these actors and agencies.	2	2	3	2	2

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation
0 – No Correlation

MODULE: BOQ and Specifications – Sanaeya Vandrewala

THEORY COURSE FORMAT: SESSIONS 8 | STUDENT ASSIGNMENTS 1 |

STUDIO FORMAT: STUDENTS PRESENTATION | FACULTY PRESENTATION

Course Objectives

Understanding & investigation of a heritage structure followed by inspection report, Conservation tenders-specifications and quantities for the selected heritage site.

COURSE METHOD: Lectures | Studio II

The course aims to create awareness and understanding the various of materials used in a heritage structure. This understanding shall help them analyse the structure in terms of its current condition. The students are expected to prepare a detailed inspection report consisting of condition mapping drawings of the identified heritage structure. Conservation solutions need to be worked out for the structure. The specifications to be given for the conservation work have to be worked out in detail. This would be followed by framing of a Conservation tender with specifications and quantities as per the documentation, analysis and conservation solutions.

The structure/structures identified for the course shall be within the city of Mumbai. A detailed set of documented drawings for the structure/structures shall be generated. A separate set of drawings shall be prepared with the condition of the structure/structures mapped on them. A condition analysis shall be carried out giving rise to the solutions for the problems recorded.

SESSIONS	TOPICS TO BE COVERED
11-05	Introduction to the module, Site documentation guide, Measure drawing, condition mapping and inventories
18-05	Abstract itemisation
25-05	Working studio for abstract of items
01-06	Working studio for abstract of items
08-06	Tallying of drawings and abstract of items
15-06	Working studio for measurement sheets
22-06	Tallying of drawings and measurement sheets
29-06	Final submission

Assignment	
Assignment 1	Abstract and measurement sheets – full BOQ of structure selected.

CO-PO mapped syllabi of Master's in Architectural & Urban Conservation 2021-2022 – Specifications & BOQ

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpret learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

Programme outcomes:

1. To acquire the ability to critically understand the context.
2. To be able to recommend real and speculative urban propositions.
3. To be able to validate urban interventions with theoretical positions.
4. To be able to achieve technical competency for the respective streams.
5. To undertake research for production of new knowledge.

Course: Specifications & BOQ

University Course Code: S2B

Sem- 2

Year - First

KRVIA Course Code: UCSB-644

Course Objectives:

1. The course aims to create awareness and understanding the various properties of materials used in a heritage structure. This understanding shall help them analyse the structure in terms of its current condition.
2. The students are expected to prepare a detailed inspection report consisting of condition mapping drawings of the identified heritage structure.
3. Conservation solutions need to be worked out for the structure. The specifications to be given for the conservation work have to be worked out in detail.

Course Outcomes:

1. Understanding materials, its uses, quantification, specification making.
2. To be able to create a tender for works for conservation projects on sites.

USM's Kamla Raheja Vidyandhri Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission	Fair	Fail
Exercise: Title									
Exercise Note / Task Assessment									
Grade	O++	O+	O	Excellent	Very Good	Good	Fair	Satisfactory	Fail
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
Area of Evaluation									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative, Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
Rigour of data collection/collation/ and curation. for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map, drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

CO-PO Mapping:

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Understanding materials, its uses, quantification, specification making.	2	2	3	3	0
CO2	To be able to create a tender for works for conservation works on sites.	3	2	3	3	0

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation
 0 – No Correlation

COURSE CODE	USOM 622.2	CREDITS	2
COURSE NAME	Cultural Express- Heritage along the Silk route	SESSIONAL MARKS	100
FACULTY	Sanaeya Vandrewala Apoorva Iyengar	EXAM SCHEME	none
CLASS DAY/TIME	Wed / 8-10 am	NON-CLASS TIME	-

PEDAGOGIC INTENT:

Since semester II is proposed as Consequence of Infrastructure: Propositions of the state it would be appropriate for the proposed elective to fit within this semester. The idea is to study trans-boundary heritage along the various silk routes both land and water and look at development of cultural centres along the route. The exchange of ideas along with transportation of goods and people resulting in influences across borders culminating in a shared heritage.

COURSE METHODOLOGY:

Learning & attempting evolution of various approaches, understanding history of the routes, internationally and in India. Studying various philosophies in the discourse; differing schools of thought within the practice. The course is divided in the following 3 modules dealing with the heritage, cultural exchanges and its management.

Module 1- Silk route and its Built Heritage

Module 2- Silk route and cultural exchange

Module 3- Silk route and Heritage Management

LECT	DATE	TEACHING CONTENT
1	06/06	Cultural routes- concept and approaches
2	13/06	World heritage of the silk route
3	20/06	Nature culture linkages
4	27/06	Traditional knowledge & Intangibles of silk route
5	04/07	Working class
6	11/07	Shared heritage of cultural routes
7	18/07	Buffer in cultural routes
8	25/07	Tourism corridor
9	01/08	Cultural diplomacy
10	08/08	Ex thematic approach for silk route sites in India

LEARNING OUTCOMES:

- Understanding complex concepts of shared heritage, diplomacy, trans-boundary sites and multidisciplinary and contextual approaches to such typology of heritage.
- Positioning Indian within the international discourse of cultural routes especially the silk

route heritages sites and its nominations.

READING LIST/REFERENCES:

- ICOMOS: The Silk Roads: an ICOMOS Thematic Study-2014
- Silk Roads: Initial Section of the Silk Roads, the Routes Network of Tian-shan Corridor- World Heritage Convention Cultural Heritage Nominated by People's Republic of China, Republic of Kazakhstan, Kyrgyz Republic

CO-PO mapped syllabi of Master's in Architectural & Urban Conservation 2021-2022 – Cultural Express- Heritage along the Silk route

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

Programme outcomes:

1. To acquire the ability to critically understand the context.
2. To be able to recommend real and speculative urban propositions.
3. To be able to validate urban interventions with theoretical positions.
4. To be able to achieve technical competency for the respective streams.
5. To undertake research for production of new knowledge.

Course: Cultural Express- Heritage along the Silk route

University Course Code: ----

Sem- 2

Year - First

KRVIA Course Code: USOM-622.6

Course Objectives:

1. The idea is to study trans-boundary heritage along the various silk routes both land and water and look at development of cultural centres along the route.
2. The exchange of ideas along with transportation of goods and people resulting in influences across borders culminating in a shared heritage.

Course Outcomes:

1. Understanding complex concepts of shared heritage, diplomacy, trans-boundary sites and multidisciplinary and contextual approaches to such typology of heritage.
2. Positioning Indian within the international discourse of cultural routes especially the silk route heritages sites and its nominations.

USM's Kamla Raheja Vidyandh Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task									
Assessment Grade	O++	O+	O	Excellent A	Very Good B	Good C	Fair D	Satisfactory E	Fail F
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
Area of Evaluation									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe/ undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map , drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

CO-PO Mapping:

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Understanding complex concepts of shared heritage, diplomacy, trans-boundary sites and multidisciplinary and contextual approaches to such typology of heritage.	3	2	2	2	2
CO2	Positioning Indian within the international discourse of cultural routes especially the silk route heritages sites and its nominations.	3	2	2	2	2

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation
0 – No Correlation

Semester III

Scheme of Teaching and Examinations

SCHEME OF TEACHING AND EXAMINATIONS

MASTER OF ARCHITECTURE (M.ARCH) URBAN CONSERVATION SEM III

	EXAM CONDUCTED BY COLLEGE	TEACHING SCHEME			
	Semester III	Lecture	Studio	Total	Credits
C3a	Conservation Approaches	2	1	3	3
C3b	Conservation Economies	2	1	3	3
C3c	Heritage Management	2	1	3	3
E3a	Urban Bye-Laws and Planning Legislation	2		2	2
E3b	Energy efficiency & Thermohygric Behaviour of Heritage structures	2		2	2
S3a	Urban Conservation		6	6	6
S3b	Management Plan		6	6	6
		10	15	25	25

SCHEME OF EXAMINATION SEMESTER III					
		EXAM SCHEME			
		Theory (Paper)	Sessional Work		Credits
Semester III			Internal	External Viva	
C3a	Conservation Approaches		100		100
C3b	Conservation Economies		50		100
C3c	Heritage Management	50	50		100
E3a	Urban Bye-Laws and Planning Legislation	50	50		50
E3b	Energy efficiency & Thermohygric Behaviour of Heritage structures		50		50
S3a	Urban Conservation		300		300
S3b	Management Plan		300		300
	TOTAL	100	900		1000

2021-22

Semester III

PG

3

	MONDAY	TUESDAY	WEDNESDAY
9.00 - 9.50	Studio III (UD +UC) Aneerudha Ketaki Shweta Vikram	Urban Byelaws +Planning Legislation UD+UC Binti Ketaki	Development Conservation (UD+UC) Binti San
9.50 - 10.40			
10.40 - 11.30			
11.30 - 12.20			
12.20 - 1.20	L U N		
1.20 - 2.10	Thesis I (UD+UC) Ainsley Sarah Binti Ginella	Conservation Approaches UC Sanaeya	Energy Efficiency of He UC Ne
2.10 - 3.00			
3.00 - 3.50			
3.50 - 4.40			

Energy Efficiency
Structu
UC
Neha

Environment
(UD+UC)
Sandeep

Semester III

Time-Table

DAY	THURSDAY	FRIDAY	SATURDAY
Finance + Economics (UC) Sanaeya	Studio III (UD + UC) Aneerudha Ketaki Shweta Vikram	Cultural Heritage & Sites of Memory (UC) Aproova	
History of Heritage Structures		Heritage Management (UC) Sanaeya	
LUNCH BREAK			
Heritage Structures Sanaeya	Housing Seminar (UD) Aditya	Heritage Management Sanaeya	
Urban Design + Ecology (UC) Sanaeya		Spatialising Meanings (UD) Ankush	

Urban Design
 Choice Elective I: Spatialising Meanings
 Choice Elective II: Housing Seminar

Heritage Economics

Course Structure 2021

Our decision on how and what to conserve is strongly influenced by economics. The funds received from governments or money invested by private initiatives is rooted in the market. Economic factors shape policy, conservation decisions, use of heritage, job opportunities for professionals and artisans, tourism, heritage value and also empowering conservation practices.

The course aims shall include:

- Provide understanding of the role conservation plays in the society

Economic thinking and ideas make indispensable contributions to our understanding of conservation's role in society. Conservation economics can evoke the shift/relevance within the role of conservation in contemporary time. Market economics holds sway in additional and more spheres of up to date society and may be a factor of growing prominence in conservation policies and decisions. This development goes hand in hand with the globalization of society. A balance of various valuing systems, discourses, and modes of study economic and cultural—is needed to handle this perceived policy shift within the larger society.

- Different ways of assessing heritage value and valuing the heritage

Understand how conservation decisions such as which sites get conserved and to what extent and manner are shaped by different ways of valuing heritage. How urban economics play important role in addressing the valuing of heritage. It play vital role in countering the developmentalism model

- Bridging Economic and Cultural approaches: ways of valuing and valorizing heritage.

“Cultural capital is a concept useful for understanding the position of heritage as an economic phenomenon whose full value cannot be captured by traditional economic categories and tools. Placed alongside other types of capital—physical (buildings, roads, etc.), natural (environmental resources and systems), and human capital.

Create a framework that suits both Culturalist and Economist- a middle ground. Valorizing heritage are often a debate on what and how global trends work. The economics often shapes the various approaches of valorizing heritage.

- Understand speculative thinking and future of conservation

Imagining possible futures for heritage and its conservation. What conservation means today and what it could mean tomorrow? It is the ‘What if’ questions raised, teaching that is based on debates and open discussions on understanding what people want, maybe a community based idea of conservation practice.

- Contributions and limitations economic discourse as related to conservation

All heritage values cannot be expressed in terms of economics or have a price put to them. One cannot necessarily use economic models to express heritage economics, hence the limitation. However it can be used to express equity in management of heritage, accessibility, cultural security, decision making etc.

1. Economic value of heritage
2. Basic economic concepts related to heritage
3. Fund raising and financing heritage projects
4. Heritage tourism
5. World heritage and economics
6. Conceptual framework to understand heritage economics
7. Valuation of cultural heritage
8. Spatial analysis of historic cores
9. City core regeneration
10. Measurements and indicators of heritage development
11. Conservation financing mechanisms and programmes

	dates	Lecture Titles
1	07 july	Historic Overview - BS
2	14 july	Economic value of heritage- SV
3	21 july	Pre-recorded Guest Lecture- Finance and Urban Services Management
4	28 july	Financing urban infrastructure cases studies, Metro - BS
5	04 aug	Tourism economics - SV
6	11 aug	Pre-recorded Guest Lecture- CSR
7	25 aug	Smart City projects, feasibility, pro poor - BS
8	1 sept	Feasibility, business plan, costing – SV
9	8 sept	Pre-recorded Guest Lecture- Financing housing and real estate development in India- (introduce assignment)
10	15 sept	Pre-recorded Guest Lecture- MMR funding
11	22 sept	Financial innovations and practices in urban development- BS
12	29 sept	Beautification projects like riverfronts, MUTP, MUIP- BS
13	06 oct	Economics and UN's Sustainable Development Goal 2030 Agenda - SV
14	13 oct	Assignment Review/ Exam revision

CO-PO mapped syllabi of Master's in Architectural & Urban Conservation 2021-2022 – Conservation Economics

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

Programme outcomes:

- To acquire the ability to critically understand the context.
- To be able to recommend real and speculative urban propositions.
- To be able to validate urban interventions with theoretical positions.
- To be able to achieve technical competency for the respective streams.
- To undertake research for production of new knowledge

Course: Conservation Economics

University Course Code: C3B

Sem- 3

Year - Second

KRVIA Course Code: UCE-733

Course Objectives:

- Understanding the conceptual framework of the critical area of the economics of heritage and its centrality for heritage resource management and sustainable development.
- The course covers techniques of cost benefit analysis and economic viability for individual historic sites and historic housing, urban conservation, cultural landscapes.

Course Outcomes (CO):

- Students shall acquire an understanding of the role conservation plays in society.
- Students will be equipped with different ways of assessing heritage value and valuing the heritage and will be able to bridge economic and cultural approaches for heritage.

USM's Kamla Raheja Vidyavidhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01 : Marks out of 50	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task Assessment									
Grade	O++	O+	O	Excellent	Very Good	Good	Fair	Satisfactory	Fail
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
Area of Evaluation									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
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Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

CO-PO Mapping:

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Students shall acquire an understanding of the role conservation plays in society.	3	2	2	2	1
CO2	Students will be equipped with different ways of assessing heritage value and valuing the heritage and will be able to bridge economic and cultural approaches for heritage.	2	3	3	3	1

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation
0 – No Correlation

KRVIA MASTERS: SEMESTER: III

YEAR 2021

FACULTY: SANAEYA VANDREWALA**SUB: HERITAGE MANAGEMENT**

This lecture on Heritage Management approaches each of its topics with the help of live projects carried out in the country. The topics become easier to understand once the students are exposed to live sites.

The Course will cover the following sub topics within the larger genre of the subjects related to Heritage Management:

- Teaching the students to how a Holistic Site Management Plan is drafted
- Various aspects or sub heads of the plan such as Visitor Management, Risk Management, Data Analysis, GAP Assessments, SWOT
- Managing sites under the tag of UNESCO
- Live sites and projects executed in the country
- An Insight into Government initiatives, such as the HRIDAY, PRASAD, SWADESH etc.

A detailed lecture schedule has been attached

DATE	LECTURES FOR HERITAGE MANAGEMENT
09 july	Introduction to Heritage Management/ Discussion for term submission / basic terms to be used- students ans questions
	Approaches for the Preparation of Management Plan. What does it entail? Definitions/ terminologies and theories/concepts & overview - UNESCO/operational guidelines
16 july	Assessing values
27-07-2021@11.30	Stakeholder management (Ritu Mohanty Guest Lecture)
	Visitor Management
06 august	Risk management – introduce assignment
13 august	Management systems and planning
27 august	Assignment-1 Post Co-vid World Heritage management plan, selected sites
	Climate Change

03 sep	Assignment-1 Post Co-vid World Heritage management plan, selected sites
17 sept	The Case of Bombay – Making of the Bombay Dossier
	Interpretation of heritage sites (readings- SV authenticity article)
24 sept	Different types of heritage sites needing Management Plans Religious tourism: Case of Bodh Gaya – UNESCO World heritage site
01 oct	Buffer zones management
08 oct	Assignment 2: Assessing buffer of a world heritage site and making changes in delineation
	Assignment 2
	Clarification of doubts if any and submissions by students

CO-PO mapped syllabi of Master's in Architectural & Urban Conservation 2021-2022 – Heritage Management

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

Programme outcomes:

- To acquire the ability to critically understand the context.
- To be able to recommend real and speculative urban propositions.
- To be able to validate urban interventions with theoretical positions.
- To be able to achieve technical competency for the respective streams.
- To undertake research for production of new knowledge.

Course: Heritage Management

University Course Code: C3C

Sem- 3

Year - Second

KRVIA Course Code: UCHM-733

Course Objectives:

- To be able to comprehend the need for various management methodologies and ideologies with respect to sites of local, national, or international importance.
- Exposure of the students to various live projects & management plans ensuring that they are able to identify the need and understand the schematic approach to Heritage Management.

Course Outcomes:

- Achieve the ability to draft site management plans with respect to identification of significance, description, and identification of issues; enabling them to understand visitor statistics and management sub plans.
- Introducing the concepts of risk & disaster management, buffer management, and applicability of various permissible interventions. Overall, the students gain the ability to envision a comprehensive document which eventually leads to the conservation of a site at an urban level.

USM's Kamla Raheja Vidyavidhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task Assessment									
Grade	O++	O+	O	Excellent	Very Good	Good	Fair	Satisfactory	Fail
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
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Area of Evaluation									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
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CO-PO Mapping:

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Achieve the ability to draft site management plans with respect to identification of significance, description, and identification of issues; enabling them to understand visitor statistics and management sub plans.	3	3	3	3	1
CO2	Introducing the concepts of risk & disaster management, buffer management, and applicability of various permissible interventions. Overall, the students gain the ability to envision a comprehensive document which eventually leads to the conservation of a site at an urban level.	3	3	3	3	1

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation
 0 – No Correlation

Course Structure Tool

Which program is the course proposed in?

M. Arch.

Submitted by (faculty name)

Sanaeya Vandrewala

B. Arch.

Course Brief

Course Schedule

M. Arch.

The courses for M.Arch. (Urban Design) and M.Arch. (Urban Conservation), for each semester of the 2-year course, are structured as below:

1. Urban Design (Core)
2. Urban Conservation (Core)
3. Studio (Combined)
4. Electives

In the following section, please select or fill in the appropriate information for your course. This will help structure and archive the courses with ease, both online and offline.

Which semester is the course proposed for?

Sem 3

Choose academic vertical

Urban Conservation (core)

University-assigned Course Name

Conservation Approaches

KRVIA-assigned Course Name

Conservation Approaches

University-assigned Code

C3A

KRVIA-assigned Code

UCA 733

Number of hours per week (as per university)

3

Number of credits (as per university)

4

Examination Method

Internal

Marks assigned (as per university)

100

Course Brief

Course Name:

Conservation Approaches

Aim

To understand the various kinds of cultural resources and various modes for their protection and enhancement. To considering heritage conservation as an important tool in city development. To understande how to make cities inclusive, safe, resilient and sustainable.

Course Objectives

Principles of Conservation studies and examining the various charters in detail considering they have been amended considering the various approaches adopted to conservation practice.

Professional ethics in conservation practice as well as a thorough understanding of the concepts of preservation, restoration, conservation, or reconstruction as a strategy to be adopted to Individual buildings Approaches to historic core and urban revitalization using the framework of Planning authorities, revitalizing strategies, community/ individual initiatives, and awareness programs.

Methodology and Method of Instruction

Relevant case studies elaborating the multi fold approach to Building conservation practice as well as examining appropriate cases through the principles under which Urban strategies can be adopted for revitalization and regeneration of historic cores. and are looked at Presentations, discussions, and debate along with adopting one's approach to a scenario (preferably the on-going studio/ thesis) is examined through a detailed report expressing the background, intent, strategy adopted, preferred outcome and its replicability.

Learning Outcomes

Other than conveying the principles of conservation studies and addressing the issues of ethics in practice the most important outcome in the course is the understanding the various approaches and practices to conservation both at the building as well as urban level based on the various stakeholders such as the planning authorities, NGOs, community / individual initiatives and awareness programmes.

Select all the formats relevant to your course

Lectures

Assignments

Faculty Names

Sanaeya Vandrewala

Course Schedule

Configurable list

Theme/Stage (if applicable)	Lecture	Lecture Form	Calendar	Lecture Content	Readings & References	Assignment	Info
	1	Lecture/Studio	07/06/202	Introduction to the subject	Conservation Historic Buildings :Bernard Feilden	No	
	2	Assignment/Review	07/13/202	Ex-case studies-good & bad for Preservation &	The Conservation Movement : Miles Glendinning	Yes	Ex-case studies-good & bad for Preservation & Restoration
	3	Assignment/Review	07/20/202	Ex-case studies-good & bad for Rehabilitation & Reconstruction	A Richer Heritage : Robert Stipe	Yes	Ex-case studies-good & bad for Rehabilitation & Reconstruction
	4	Assignment/Review	07/27/202	Ex-case studies-good & bad for Adaptive re-use	Heritage and Environment: Shyam Chainani	Yes	Ex-case studies-good & bad for Adaptive re-use
	5	Lecture/Studio	08/03/202	Material based approach-Understanding	Urban Heritage in Indian cities: A compendium of good Practices: PEARL	No	
	6	Lecture/Studio	08/10/202	Value based approach-Understanding values	Revisoning Indian Cities:	No	
	7	Lecture/Studio	08/17/202	Living Heritage based approach-Understanding	The Heritage Reader	No	
	8	Lecture/Studio	08/24/202	Heritage Character appraisal	Passion Projects: Intach	No	
	9	Lecture/Studio	08/31/202	Historic Urban Landscape (HUL) approach		No	
	10	Lecture/Studio	09/07/202	Heritage impact assessment		No	
	11	Lecture/Studio	09/14/202	Post disaster recovery		No	
	12	Lecture/Studio	09/21/202	Cultural Heritage Restitution		No	
	13	Lecture/Studio	09/28/202	Interpretation as an approach-cases study of historic interiors		No	
	14	Lecture/Studio	10/05/202	Urban renewal-regeneration of a historic core		No	
	15	Assignment/Review	10/12/202	Assignment review		Yes	Urban renewal plan-regeneration of the historic core after a disaster scenario- earthquake, fire, development, flood, pandemic conflict
	16	Assignment/Review	10/19/202	Assignment review		Yes	Urban renewal plan-regeneration of the historic core after a disaster scenario- earthquake, fire, development, flood, pandemic conflict

CO-PO mapped syllabi of Masters in Architectural & Urban Conservation 2021-2022 – Conservation Approaches

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpret learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

Programme outcomes:

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

Course: Conservation Approaches

University Course Code: C3A

Sem- 3

Year - Second

KRVIA Course Code: UCA-733

Course Objectives:

1. Principles of Conservation studies and examining the various charters in detail considering they have been amended using the various approaches adapted to conservation practice.
2. Professional ethics in conservation practice as well as a thorough understanding of the concepts of preservation, restoration, conservation, or reconstruction as a strategy to be adopted to Individual buildings
3. Approaches to historic core and urban revitalization using the framework of Planning authorities, revitalizing strategies, community/ individual initiatives, and awareness programs.

Course Outcomes (CO):

1. Conveying the principles of conservation studies and addressing the issues of ethics in practice.
2. understanding the various approaches and practices to conservation both at the building as well as urban level based on the various stakeholders such as the planning authorities, NGOs, community / individual initiatives and awareness programmes.

USM's Kamla Raheja Vidyavidhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task									
Assessment Grade	O++	O+	O	Excellent A	Very Good B	Good C	Fair D	Satisfactory E	Fail F
Percentage Equivalent out of 10.0	90% and above 9.0	80% 8.0	79% - 75% 7.9 - 7.5	74% - 70% 7.5 - 7.0	69% - 65% 6.9 - 6.5	64% - 60% 6.4 - 6.0	59% - 55% 5.9 - 5.5	54% - 50% 5.4 - 5.0	49% - 40% 4.9 - 3.0
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CO-PO Mapping:

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Conveying the principles of conservation studies and addressing the issues of ethics in practice.	3	2	2	2	1
CO2	Understanding the various approaches and practices to conservation both at the building as well as urban level based on the various stakeholders such as the planning authorities, NGOs, community / individual initiatives and awareness programmes.	3	3	3	2	1

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation
0 – No Correlation

Title of the Course: URBAN BYLAWS AND PLANNING LEGISLATION

Marks 100 Hrs 2 per week

Description of course: This course engages the student with the awareness of govt. policies, regulations, rules and laws related to land, property and urban development.

Course Name: URBAN BYLAWS AND PLANNING LEGISLATION

Course Tutors: Dr Binti Singh and Ketaki Bhadgaonkar

Aim: The course includes the study of the Constitution of India and subsequently the study of Urban Land Ceiling Act, Rent Control Act, Land Acquisition Act, Environment Protection Act, Co-operative Society Act, Apartment Ownership Act, Maharashtra Town and Regional Planning Act and the National building Code and any other important/relevant act. It also includes the study of Development Control Rules and Regulation, including special regulations for TDR, protection to heritage and conservation, etc.

Course Objectives:

- Theoretically understanding of governance
- Thorough understanding of urban policy and governance systems, institutions in India post 1947 to present
- Major urban laws, Acts, policies and programs
- General understanding of major urban sectors
- Recent concepts like City Liveability Index and current programs like SCM

Learning Outcomes:

Students will develop a thorough understanding of governance, urban policy, planning legislations and institutions operative in India and how different sectors work. They will also develop an understanding of new concepts like City Liveability Index, SDGs, the importance of gender and other variables in informing urban legislations in India with a comparative global understanding

Course Lectures Schedule:

Lecture Dates	Lecture Titles	Lecture Description
13/07/2021	Constitution of India and the History of Urban policy and governance in India	<ul style="list-style-type: none">• Presentation on Constitution of India- Preamble, Values and the Federal structure• Role and functions of the major institutions• Important articles, provisions and schedules related to urban policy and governance• Nation building exercise, post 1947

		<ul style="list-style-type: none"> • Introduction to 5-year plans • A brief discussion on all the plans • The role and functions of the former Planning Commission/ now Niti ayog • Typology of Plans • Sectoral Planning- Urban Plans, Regional and development plans, Road Plan • Urban Planning Components in the 5-year Plans • Case study: Planning in Bombay/Mumbai and Delhi (recap)
	Legislative Procedures	<ul style="list-style-type: none"> • Introduction - Legislative Procedures • Introduction – Policy, Act, Guideline
20/07/2021	Institutional framework of urban policy/governance in India- discussion on major legislations	Urban Legislations- Legal framework for urban and town planning, 74th Amendment Act, 1992, related Acts and policies and governance structure MRTP Act, Municipal Acts, for instance Maharashtra is governed by 4 municipal Acts CRZ norms, TP schemes, SRP, TDR
27/07/2021	Land Reforms	<p>Urban Land ceiling Act</p> <p>Land Acquisition Act</p> <p>Land Pooling Act</p>
03/08/2021	Institutional framework of urban policy/governance in India- discussion on institutions	<p>Institutions- Statutory authorities involved in Urban Local Governance</p> <p>System like MCGM, MMRDRA, MHADA, UD, CIDCO, SRA. Their structure, functions, powers, process and resource, performance. Interface with NGOs, other agencies, role of domestic and international actors like World Bank (MIUP project etc) private sector/business as an agent in influencing policy decisions (case on industrial policies/ SEZs/ environmental clearance policies), R and R policy, Slum rehabilitation policy</p> <p>☑ Role of bureaucracy, judiciary and media in influencing policy decisions</p> <p>☑ Institutional innovations eg. PPP</p>
10/08/2021	Model Building Bye laws	Discussion on the relevant sections of MRTP
17/08/2021	Governance- Theoretical understanding	Governance- Theoretically- Definition, concepts, components, government and governance, hierarchy and structure, pluralization of the state

		<ul style="list-style-type: none"> ✓ Urban governance can be elaborated with a discussion on its origin and rationale behind its emergence in Europe in the 1980s, Australia, New Zealand and UK are forerunners, New forms of urban governance like Partnerships discussed by Elander international case studies, cities like Belfast and London where partnerships have been used for urban renewal ✓ Forms of urban governance- Jon Pierre talks of 4 forms of urban governance - a)welfarist, b)managerial(related to NPM), c)corporatists and d) Pro-growth approach ✓ Participatory Process in Urban Governance- Stakeholders' participation, roles and responsibilities, access to government by various stakeholders. Case studies, Feedback on policies. Service Delivery, accountability and people's participation: decentralization and local governance in India, social audit now part and parcel of many government schemes, jun sunwaees, Citizens cards, new models of social accountability and participation like Area Sabhas under Community Participation Law and Public Disclosure law under the JNNURM; community/citizen engagement under Smart City Mission 2015, LAP
24/08/2021	City – Region Linkages	<p>International examples like the prefectures in Japan. Example : The Greater Tokyo Area is the most populous metropolitan area in the world, consisting of the Kantō region of Japan as well as the prefecture of Yamanashi of the neighboring Chūbu region. In Japanese, it is referred to by various terms, one of the most common being Capital Region.</p> <p>Indian examples like MMR and NCR</p> <p>Growth of cities scale, complexity and its impact on national development, cities as engines of growth, cities as ecosystems, resources in cities.</p> <p>City, fringe and the periphery - physical and functional linkages, peri-urban development, Mega Cities and their Problems and Issues</p>

31/08/2021	Urban Sectors	Housing Water Solid Waste Management
07/09/2021	Housing related Acts	Co-op Societies Act Rent Control Act Apartment Ownership Act
21/09/2021	New Concepts informing Urban policy	General discussion on SDGs urban sustainability quality of life inclusion climate change Informality Gender And their importance in urban policy
28/09/2021		Environment Protection Act Protection of Heritage and Conservation
05/10/2021	Smart City Mission in India	SCM in India Convergence with other policies like AMRUT, HRIDAY, SBM, ODF, Digital India, PMAY Current Status with examples Challenges

CO-PO mapped syllabi of Masters in Urban Design 2021-2022 – Urban Byelaws and Planning Legislation

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpret learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorize and conceptualize ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

Programme outcomes:

- To acquire the ability to critically understand the context
- To be able to recommend real and speculative urban propositions
- To be able to validate urban interventions with theoretical positions
- To be able to achieve technical competency for the respective streams
- To undertake research for production of new knowledge

Course: Urban Byelaws and Planning Legislation

University Course Code: MUDC302

Sem- 3

Year - Second

KRVIA Course Code: UBL-722

Course Objectives:

- Theoretically understanding of governance
- To develop a thorough understanding of urban policy and governance systems, institutions in India post 1947 to present.
- Major urban laws, Acts, policies and programs
- General understanding of major urban sectors and recent concepts like City Liveability Index and current programs like SCM

Course Outcomes:

- Students will develop a thorough understanding of governance, urban policy, planning legislations and institutions operative in India and how different sectors work.
- They will develop an understanding of new concepts like City Liveability Index, SDGs, the importance of gender and other variables in informing urban legislations in India with a comparative global understanding.
- The students will be equipped with an understanding of implications of different urban Acts, reforms and policies in design and practice.

USM's Kamla Raheja Vidyavidyalaya Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task Assessment									
Grade	O++	O+	O	A	B	C	D	E	F
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
Area of Evaluation									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map, drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

	CO	PO1: Critical underst anding of context	PO2: Urban proposi tioning	PO3: urban interve ntions with theoreti cal positio ns	PO4: Techni cal Compe tency	PO5: Creatio n of new knowle dge
CO1	Students will develop a thorough understanding of governance, urban policy, planning legislations and institutions operative in India and how different sectors work.	3	2	2	3	0
CO2	They will develop an understanding of new concepts like City Liveability Index, SDGs, the importance of gender and other variables in informing urban legislations in India with a comparative global understanding.	3	2	3	3	0
CO3	The students will be equipped with an understanding of implications of different urban Acts, reforms and policies in design and practice.	3	2	3	2	1

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation
0 – No Correlation

Course Structure Tool

Which program is the course proposed in?

M. Arch.

Submitted by (faculty name)

Neha Parulekar

B. Arch.

Course Brief

Course Schedule

M. Arch.

The courses for M.Arch. (Urban Design) and M.Arch. (Urban Conservation), for each semester of the 2-year course, are structured as below:

1. Urban Design (Core)
2. Urban Conversation (Core)
3. Studio (Combined)
4. Electives

In the following section, please select or fill in the appropriate information for your course. This will help structure and archive the courses with ease, both online and offline.

Which semester is the course proposed for?

Sem 3

Choose academic vertical

Urban Conservation (core)

University-assigned Course Name

ENERGY EFFICIENCY AND BUILDING BEHAVIOUR

KRVA-assigned Course Name

ENERGY EFFICIENCY AND BUILDING BEHAVIOUR

University-assigned Code

E3B

KRVA-assigned Code

UCEE722

Number of hours per week (as per university)

2

Number of credits (as per university)

2

Examination Method

Internal

Marks assigned (as per university)

50

Course Brief

Course Name:

ENERGY EFFICIENCY AND BUILDING BEHAVIOUR

Aim

The Sessions are programmed in such a way that they introduce the idea of Energy Efficiency with a Heritage Building context, with various thermal effects on historic buildings, crumbling or life of various traditional materials, daylighting, etc. The program would also intend to incorporate other modern terms such as LEED ratings, GRIHA etc with experts from the field interacting with the students.

Course Objectives

To be able to apply and understand the idea of Energy Efficiency and its various lenses to historic/ traditional buildings.

1. A ten session lecture series with a tentative 3 guest lecture interaction and integrated case study citing for better understanding. This will further enable the students to understand not only structure to climate/ sun/ water relationship but the behavior of materials to these changes.
2. The course will end in GROUP Submissions with students citing case studies and methods to make their chosen case studies more energy efficient.
3. Students should be able to identify with newer notions of energy efficiency like LEED rating, GRIHA etc.
4. Identification of case studies with reference to international norms and cultures
5. UNESCO and sustainability.

Methodology and Method of Instruction

Lectures, videos, assignments, guest lectures

Learning Outcomes

Learning the importance of Energy efficient methods in the field of conservation, the students sensitize themselves to green, sustainable methods and approaches towards Conservation.

Select all the formats relevant to your course

Lectures

Assignments

Faculty Names

Neha Parulekar

Course Schedule

Configurable list

Theme/Stage (if applicable)	Lecture No.	Lecture Format	Calendar	Lecture	Readings & References	Assignment?	If yes, assignment brief
	1	Lecture/Studio	07/07/2021	Introduction: Types of thermal movements in buildings & damage followed by a movie by 3encult		No	
	2	Lecture/Studio	07/14/2021	Introduction 2		No	
	3	Lecture/Studio	07/21/2022	Basic Principles: Thermal comfort & its reasons and other definitions, cultural heritage and energy, 3encult		No	
	4	Lecture/Studio	07/28/2021	Basic Principles: Thermal comfort & its reasons and other definitions, cultural heritage and energy, 3encult		No	
	5	Lecture/Studio	08/04/2021	Airtightness, Daylighting and other concepts		No	
	6	Lecture/Studio	08/11/2021	LEED & GRIHA: NEWER NORMS IN THE CONCEPT		No	
	7	Lecture/Studio	08/18/2021	Guest Lecture I on GRIHA		No	
	8	Assignment	08/25/2021	Assignment		Yes	Impacts of the already learned
	9	Lecture/Studio	09/01/2021	SITE SPECIFIC CLIMATE RESPONSE +		No	
	10	Lecture/Studio	09/08/2021	Climate and heritage architecture: Case of Himachal Pradesh + Talk by Swapnil Bhole on the traditional buildings in Himachal and their response		No	
	11	Lecture/Studio	09/15/2021	LEED rating		No	
	12	Lecture/Studio	09/22/2021	IRELAND:Upgrading thermal efficiency of a building. Case study		No	
	13	Lecture/Studio	09/29/2021	Impact of Solar Radiation, Precipitation on Built heritage		No	
	14	Lecture/Studio	10/06/2021	Experience in Energy efficient building and conservation		No	
	15	Lecture/Studio	10/13/2021	Assignment		Yes	Group Presentatio
	15	Lecture/Studio	10/20/2021	Presentation		Yes	Case presentation - Individual

CO-PO mapped syllabi of Master's in Architectural & Urban Conservation 2021-22 – Energy Efficiency & Thermohygric Behaviour of Heritage Structures

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

Programme outcomes:

- To acquire the ability to critically understand the context.
- To be able to recommend real and speculative urban propositions.
- To be able to validate urban interventions with theoretical positions.
- To be able to achieve technical competency for the respective streams.
- To undertake research for production of new knowledge.

Course: Energy Efficiency & Thermohygric Behaviour of Heritage Structures

University Course Code: E3B

Sem- 3

Year - Second

KRVIA Course Code: UCEE-722

Course Objectives:

- To be able to apply and understand the idea of Energy Efficiency and its various lenses to historic/ traditional buildings.
- Students should be able to identify with newer notions of energy efficiency like LEED rating, GRIHA etc.
- This will further enable the students to understand the structures relationship to climate/ sun/water etc and the behaviour of materials to these external changes.

Course Outcomes:

- Learning the importance of Energy efficient methods in the field of conservation.
- The students shall be sensitized to green, sustainable methods and approaches towards Conservation.

USM's Kamla Raheja Vidyandhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task Assessment									
Grade	O++	O+	O	Excellent	Very Good	Good	Fair	Satisfactory	Fail
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
Area of Evaluation									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative, Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map , drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

CO-PO Mapping:

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Learning the importance of Energy efficient methods in the field of conservation.	3	1	1	3	1
CO2	The students shall be sensitized to green, sustainable methods and approaches towards Conservation.	2	1	1	3	0

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation
0 – No Correlation

Infrastructural Urbanism

Exploring the urbanism along the new Metro Corridors of Mumbai

M.Arch UD + UC, Sem 2, 2022

Studio Faculty - Aneerudha Paul, Ainsley Lewis, vikram pawar , Shweta Wagh , Ketaki Bhadgaonkar, Aditya Sawant and Aradhana Paralikar .

Introduction

The urban infrastructure networks, with their complex network architectures, work to bring heterogeneous places, people, buildings and urban elements into dynamic relationships and exchanges which would not otherwise be possible (Graham & Marvin, 2001).

The cities are witnessing growth of population densities resulting in the spread of the urban fabric, creating a demand for a rapid connectivity by the means of new transit systems. The studio intends to explore the dynamic relationships established as a result of introduction of a new transit network in a city fabric. The attempt would be to understand the causative forces of transformation in the immediate context of the urban blocks where the transit stations are inserted. The new network often creates development pressures due to increase in real estate values, increase in the population densities, floating population, changes in urban form, social fragmentation, etc. The students will attempt to understand these complexities and explore the role of urban design and conservation in the development process.

As a part of this process, the students will identify multiple nodes that are vulnerable to urban development pressures along the metro rail network that is under construction in the city of Mumbai. The intent is to study each node in detail with an attempt to assess the impact of the metro corridor/stations on the urban area in consultation with the various community groups and stakeholders. The studio will culminate in the form of design propositions including urban structure, control, guidelines, building scenarios and other mechanisms. The resolutions are expected to address all issues from conception to realization.

Schedule of the project:

Date	Day	Submissions/Lectures
11th April	Monday	8.00 am to 9.00 am - Lecture by Shweta and Hussain 9.00 am to 10.00 am - Lecture by Aneerudha Paul 10.00 am to 11.00 am - Lecture by Nitin Killawala Followed by Introduction to the studio project + Formation of groups
12th April	Tuesday	8.00 am onwards - Site visit metro corridor Northern leg
13th April	Wednesday	7.30 am onwards - Site visit metro corridor Southern leg
19th April	Tuesday	A1 Panel 1 no. - Individual response based on the site visit (Individual work) A1 Panel 1 no. - Group's regional study of the metro corridor + justification and finalization of nodes to be studied in the detail (group work) Lecture by Studio Faculty - 1 hour
22nd April	Friday	Studio Discussion
26th April	Tuesday	Lecture by Studio Faculty - 1 hour Studio discussion
29th April	Friday	Studio Discussion
3rd May	Tuesday	Lecture by Studio Faculty - 1 hour Studio discussion
6th May	Friday	A0 Panel 2 nos. - Presentation of the study of node + model (Group work)
10th May	Tuesday	Lecture by Studio Faculty - 1 hour Studio discussion
13th May	Friday	A1 Panel 1 no. - Individual response on the node + vision + argument (Individual work)
17th May	Tuesday	Lecture by Studio Faculty - 1 hour Studio discussion
20th May	Friday	A0 Panel 2 nos. - Presentation of the possible individual propositions + strategies + concept design plan for the node (individual work)
21st May - 31st May		Holiday
3rd June	Friday	Studio Discussion
6th June	Tuesday	Studio Discussion

10th June	Friday	Studio Discussion
13th June	Tuesday	A0 Panel 2 nos. - Pre Final review - Presentation of the individual propositions with models.
17th June	Friday	Work on representation of panels and model
21st June	Tuesday	Work on representation of panels and model
24th June	Friday	FINAL REVIEW

CO-PO mapped syllabi of Masters in Architectural & Urban Conservation 2021-2022 – Design Studio A+B

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpret learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

Programme outcomes:

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

Course: Studio II

University Course Code: MUDS202/S2A+B Sem- 3 Year - Second

KRVIA Course Code: UDCS61212.2/UDCS-688

Programme outcomes:

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

Course Objectives:

- Situation analysis at neighbourhood and /or precinct/ heritage zone level.
- Detail investigations, surveys, and analysis for condition assessment of resources.
- Engage with various stakeholders including agencies, communities etc. and learn to communicate with them.

Course Outcomes:

- Objectivity in data collection and assessment.
- Devise pragmatic and localized programmatic strategies on complex urban issues.
- The outcome is imagined as a practice orientation to the studio.
- Learn to formulate urban intervention possibilities through a process of continuous interaction with these stakeholders.

Assessment	O++	O+	Outstanding	Excellent	Very Good	Good	Fair	Satisfactory	Fail
Grade	O++	O+	O	A	B	C	D	E	F
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0

Area of Evaluation

Site observations and ability to critically analyse the data gathered.	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair. Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
Rigour of data collection/collation/ and curation, for each	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of readings/ maps/ drawings/ case studies	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
Presentation/ representation or articulation, coherence and clarity of argument in the assigned/selected form/ mode	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

CO-PO Mapping

	CO	PO1: Critical understandi ng of context	PO2: Urban proposition ing	PO3: urban interventi ons with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledg e
CO 1	Objectivity in data collection and assessment.	3	2	2	1	2
CO 2	Devise pragmatic and localized programmatic strategies on complex urban issues.	2	2	2	2	2
CO 3	The outcome is imagined as a practice orientation to the studio.	2	1	3	2	2
CO 4	Learn to formulate urban intervention possibilities through a process of continuous interaction with these actors and agencies.	2	2	3	2	2

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation
0 – No Correlation

MUDC 303	COURSE NAME	<i>Thesis 1</i>		SEMESTER	<i>III</i>	CREDITS	<i>4</i>
	FACULTY	<i>Ainsley Lewis, Ginella George, Dr. Binti Singh, Sarah George</i>			<i>150</i>	SCHEME OF EXAMINATION	<i>Internal</i>
	TIME	<i>Monday 1:20 pm to 3:20 pm</i>			<i>2</i>	TIME REQUIRED OUTSIDE OF CLASS	<i>-</i>
UNIVERSITY COURSE DESCRIPTION	The Thesis is divided into two parts, one that is initiated in semester 3 and the second demonstrated in semester 4. In the first part, students are required to put forth theoretical arguments and raise critical issues, which would help them create a method to observe, map, analyze and frame possibilities of interventions or initiate transformation in a particular urban condition. The first part of the thesis would assist the students to simultaneously be able to create the structure of the argument of the thesis that would culminate in the form of a written report.						
PEDAGOGIC INTENT	The course is designed to enable students in identifying issues in the research design in carrying out a thesis project						
METHODOLOGY	Faculty will orient students through lectures and group discussions on identifying and organizing the essential components required for selecting a research topic and writing a thesis proposal						
SCHEDULE	DAY	DATE	TEACHING CONTENT OF THE DAY	MARKING DISTRIBUTION	ASSIGNMENT/DELIVERABLE		
week 1	Monday	5.7.2021	Introduction to Framework & Schedule.				
week 2	Monday	12.7.2021	Group Discussion				
week 3	Monday	19.7.2021	Defining the Research question; Group Discussion				
week 4	Monday	26.7.2021	Group Discussion				
week 5	Monday	2.8.2021	Group Discussion				
week 6	Monday	9.8.2021	Writing an Abstract				
week 7	Monday	16.8.2021	Group Discussion				
week 8	Monday	23.8.2021	Group Discussion				
week 9	Monday	30.8.2021	How to structure a Thesis proposal				
week 10	Monday	6.9.2021	Group Discussion				
week 11	Monday	13.9.2021	Group Discussion				
week 12	Monday	20.9.2021	Literature review				
week 13	Monday	27.9.2021	Group Discussion				
week 14	Monday	4.11.2021	Research Design and Methodology				
week 15	Monday	11.11.2021	Group Discussion				
week 16	Monday	18.10.2021	Group Discussion				
	Monday	25.10.2021	Presentation by students				
EVALUATION CRITERIA	<i>Individual/ Group based presentations and class assignments</i>						
LEARNING OUTCOMES	<i>Students will be able to comprehend the objectives of doing research, analyzing data and writing a thesis proposal</i>						
READING LIST	1. <i>The Sage Handbook of Qualitative Research</i> by Norman K. Denzin and Yvonna S. Lincoln 2. <i>The City Reader</i> , Edited by Richard T. LeGates and Frederic Stout						

CO-PO mapped syllabi of Masters in Urban Design 2021-22– Thesis-1

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpret learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

Programme outcomes:

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

Course: Thesis-1

University Course Code: MUDC 303

Sem- 3

Year - Second

Course Objectives:

1. To equip students to develop a methodological framework
2. To hone their skills in research in order to enhance their individual thesis proposals

Course Outcomes (CO):

1. Creating methods to observe, map, analyze and frame possibilities of interventions or initiate transformation in a particular urban condition
2. Writing a thesis proposal

USM's Kamla Raheja Vidyavidhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task Assessment									
Grade	O++	O+	O	Excellent	Very Good	Good	Fair	Satisfactory	Fail
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	F
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 4.0%
Area of Evaluation									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map, drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

CO-PO Mapping:

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Creating methods to observe, map, analyze and frame possibilities of interventions or initiate transformation in a particular urban condition	3	3	2	1	3
CO2	Writing a thesis proposal	3	3	2	1	3

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation
 0 – No Correlation



EMBEDDING 'NATURE BASED SOLUTIONS' IN CITIES:

**Reimagining Urban Infrastructure
Through Landscape**

Environment and Ecology II

Course Structure for KRVA Masters UD +UC Elective.

Sandeep B. Menon
Course conductor

KRVIA M.ARCH: SEM: III (URBAN DESIGN/CONSERVATION)

YEAR: 2021-2022

SUB/STUDIO: Environment and Ecology II

ELECTIVE NAME:

Embedding 'Nature Based Solutions' In Cities: Reimagining Urban Infrastructure Through Landscape

FACULTY: Sandeep B. Menon

INTENT:

The course intends to provide thorough exposure to the students regarding the state-of-the-art research outcomes, theoretical constructs and global world views in the field of ecological urbanism and 'nature based' infrastructural futures. The course acknowledges the academic and professional commitment to the UN Sustainable Development Goals 2030 target and is designed to impart a holistic understanding of the urban landscapes as complex ecological systems which encompass the dynamic relation between ecology and space.

The course deals with advanced concepts of ecology and explores relevant contextual frameworks and approaches for the planning and design of urban landscapes as urban infrastructure.

Course Objectives:

- To introduce students to the concept of 'Anthropocene' as a global epoch and the cutting edge research on 'Planetary Boundaries'.
- To introduce advanced principles, concepts and methods of understanding urban ecology and Infrastructural urbanism.
- To enable students to understand and discern the natural processes in the environment and their implications in the design and planning.
- To demonstrate landscape approaches in the planning, design and management of greenfield and brownfield interventions through the help of socially and environmentally appropriate case studies of projects.

METHODOLOGY:

The course builds upon the knowledge base shared with the students in their first semester course “Landscape Design, Urban Ecology and Natural Heritage”. The current course is designed as a series of lectures, relevant case study presentations and short documentary screenings. The modules will have a set of reference materials as well which will be provided to the students in PDF formats a week before the module begins. Students are expected to familiarize themselves with the reading material before the lectures.

The course is divided into three modules:

The first module ‘**Theory and Methods**’ (5 Classes) looks at introducing the students to advanced concepts of Ecological Urbanism and Urban Infrastructural Histories. These include lectures and presentations on ‘Anthropocene’, the ‘Climate Crisis’ and ‘Nature Based Solutions’ and the ideas of coping, adapting and transforming in the changing climatic future. The concepts of ‘Planetary Boundaries’ and the paradox of ‘Infinite Growth’ will also be taken up as part of the module with the help of an animated documentary followed by allied lectures and discussions.

The second module titled ‘**Urban Metabolism + Flows**’ deals with the theory and case examples of infrastructural projects from the global South and other relevance urban examples pertaining to energy, material + water, information, human movement and the present pandemic of the zoonotic Coronavirus crisis. The physical manifestations of these processes and the possibilities of ensuring resilience in the urban structure and design as a response to the constant flux.

The third module titled ‘**Landscapes as Infrastructure**’ deal with the topics pertaining to the urban form, urban environment, resilience, urban ecological structure and the interrelations with the various components which constitute the whole. The various topics are explained using a synthesis of ecological planning

and design methods in which urban design is emphasized as mode for ecological intervention. All the lectures are based on relevant case studies which help in demonstrating the relevance of understanding the methods of intervention.

While reviewing the case studies in each of the generic categories, factors such as intention, approaches, methods, processes, variants, environmental, spatial and temporal issues, conceptual position of the designers; which determine the specificity of design response will be explored.

LECTURE SCHEDULE

Module One: Theory and Methods	08-08	Infrastructural Urbanism- Socio-ecological transformations over time: <i>Lecture + Presentation</i>
		Urban transformations through time and future imaginations
	15-08	Introduction to Nature Based Solutions (NBS) and bridge with Sem 1 Course content
		Introduction of Assignment 1: Mapping + assessing the City's Infrastructural history
	22-08	Planetary Boundaries: <i>Lecture + Presentation</i>
Module Two: Urban	29-08	The idea of Infinite Growth as an indicator of 'Development'- Docu Screening and Discussion Documentary Screening: 'There's No Tomorrow' by Dermot O'Conner (Viewing link with subtitles will be provided after the lecture slot) 'Climate Crisis' and 'Infrastructural Urbanism': Lecture on Coping, Adapting and Transforming in the changing climatic future Assignment 2: Discerning the 'ripple effects' of climate crisis in Mumbai
	06-09	Climate Change, Pandemics and Urban Infrastructural Transformations: Lecture + Presentation

- 13-09 Case Examples: London, Bombay, Philadelphia, Velha Goa and the current global pandemic of Covid
Changing Energy Dependencies + Urban Transportation:
Lecture + Presentation
- 20-07 Alternative ideas: Tactical Urbanism and other urban 'acupuncture'
Case Example- Curitiba
Landscapes as Resilient Living Machines: Food and its implication on Urbanism
- 27-07 Local/Introduced Crops and its implications, Globalised Food supply Chains, Changing consumption patterns, Urban Agriculture
Case Study: East Kolkata Wetland Bio-Region
Urban landscapes as Blue Green Infrastructure: I
Presentation + Lecture
- 03-08 A case study of Urban River Kallang Restoration in Singapore
Introducing
Assignment 3: Group Research work and preparation for presentation: 'Eco-City Resume: Reimagining Mumbai's Infrastructure based on NBS'
Urban landscapes as Blue Green Infrastructure: II
Responses to combat Urban Flooding- Lecture + Presentation
- 10-08 Sustainable Urban Drainage Systems(SUDS)
Case Study: Chulalongkorn University Centenary Park and Precinct Upgradation, Bangkok
Ecological Restoration of Derelict Landscapes as Urban Infrastructure: Lecture + Presentation
- 17-08 Case Study: Fresh Kills, Staten Island- Land Fill Reclamation
Students' Research work Submission and Presentation:

'Mumbai Ver 2.0: Reimagining Mumbai's Infrastructure based on NBS'

24-08

Final Marking and Discussion
Urban Landscapes for Place:
Eco-restoring of the Highline Park, New York

Eco-restoration of an urban blight, experimenting with urban flora, Concepts of Crime Prevention through Environmental Design (CPTED)
Concluding session

SELECTED READINGS:

[abridged PDFs of the relevant chapters will be provided to students a week before the lecture]

Berger, Alan. "Urban Land is a Natural Thing to Waste" in Harvard Design Magazine Fall 2005/Winter 2006.

Brown, Lester. (2008) 'Plan B 3.0: Mobilizing to Save Civilization'. W.W. Norton & Co.

Cervero, Robert. (2004) "Transit and the Metropolis: Finding Harmony" in Wheeler, Stephen M. and Timothy Beatley. The Sustainable Urban Development Reader. London and New York: Routledge.

Hough, M (2004). 'Cities and Natural Processes'. Routledge

Huber, J (2010). 'Low Impact Development: A design Manual for Urban Areas'. University of Arkansas

Lynch, Kevin (1990). "The Waste of Place" in Places: Vol. 6: No. 2. 1990.

Mostafavi, M., Doherty, G (2010). 'Ecological Urbanism'. Massachusetts: Harvard University, Graduate School of Design

Orff, Kate (2016). 'Toward an Urban Ecology: SCAPE / Landscape Architecture': Monacelli Press

Plunz, Richard (2017) 'City Riffs: Urbanism, Ecology, Place' GSAPP, Columbia University

Rankin, Tom. (2015) "Rome Works: An Architect Explores the World's Most Resilient City. Peruzzi Press

Rifkin, Jeremy. (2010) 'The Third Industrial Revolution'. *Available on-line

Sassen, Saskia. (2007) "Seeing Like a City" in Burdett, Ricky, ed. The Endless City. Phaidon.

Sennet, Richard.(2007) "The Open City" in Burdett, Ricky, ed. The Endless City. Phaidon

Spirn, A.W. (1985). 'The Granite Garden-Urban Nature and Human Design'. New York: Basic Books

Stuart, Tristram, (2009)"Waste: Uncovering the Global Food Scandal". London: Penguin. p. 220-231.

CO-PO mapped syllabi of Masters in Architectural & Urban Conservation 2021-22 – Environment & Ecology

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpret learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

Programme outcomes:

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

Course: Environment & Ecology

University Course Code: ---

Sem-3

Year - Second

KRVIA Course Code: USOM 724

Course Objectives:

- To introduce students to the concept of ‘Anthropocene’ as a global epoch and the cutting-edge research on ‘Planetary Boundaries’.
- To introduce advanced principles, concepts, and methods of understanding urban ecology and Infrastructural urbanism.
- To enable students to understand and discern the natural processes in the environment and their implications in the design and planning.
- To demonstrate landscape approaches in the planning, design and management of greenfield and brownfield interventions through the help of socially and environmentally appropriate case studies of projects.

Course Outcomes:

- To understand advanced concepts of Ecological Urbanism and Urban Infrastructural Histories.
- Proposing the physical manifestations of these processes and the possibilities of ensuring resilience in the urban structure and design as a response.
- To enable the structure and the interrelations with the various components which constitute the whole, using a synthesis of ecological planning and design methods in which urban design is emphasized as mode for ecological intervention.

USM's Kamla Raheja Vidyavidyalaya Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task Assessment									
Grade	O++	O+	Outstanding	Excellent	Very Good	Good	Fair	Satisfactory	Fail
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
Area of Evaluation									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
Presentation/ articulation, coherence and clarity of argument in the form of power-point, paper, map , drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

CO-PO Mapping:

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	To understand advanced concepts of Ecological Urbanism and Urban Infrastructural Histories.	3	2	1	3	3
CO2	Proposing the physical manifestations of these processes and the possibilities of ensuring resilience in the urban structure and design as a response.	3	3	3	3	3
CO3	To enable the structure and the interrelations with the various components which constitute the whole, using a synthesis of ecological planning and design methods in which urban design is emphasized as mode for ecological intervention.	3	3	3	3	3

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation
0 – No Correlation

Semester IV

Scheme of Teaching and Examinations

SCHEME OF TEACHING AND EXAMINATIONS

MASTER OF ARCHITECTURE (M.ARCH) URBAN CONSERVATION SEM IV

	EXAM CONDUCTED BY COLLEGE	TEACHING SCHEME			
	Semester IV	Lecture	Studio	Total	Credits
E4a	Choice Based Electives-1		4	4	2
E4b	Choice Based Electives-2		6	6	6
S4a	Thesis		15	15	15
			25	25	25

SCHEME OF EXAMINATION SEMESTER IV					
		EXAM SCHEME			
		Theory (Paper)	Sessional Work		
	Semester III		Internal	External Viva	Credits
E4a	Choice Based Electives-1		50		50
E4b	Choice Based Electives-2		100		100
S4a	Thesis		300	550	850
	TOTAL		450	550	1000

2021-22

Semester IV

		MONDAY	TUESDAY	WEDNESDAY
PG 2	8.00 - 8.50	Cultural Territories and Urban Resilience (UD+UC) Manoj Parmar	Thesis Writing (UD + UC) Ginella Sarah Binti Ketaki Aditya	Self S
	8.50 - 9.40			
	9.40 - 10.30	Building Resilience Amongst Communities Urban Conservation	Thesis II Manoj/Chaarvi, Shweta, Aditya, Ginella	Theoretical Un Formulating The Guest Speakers (
	10.30 - 11.20			
	11.20 - 12.00			
	12.00-12.50	Aneerudha Paul	Thesis II Paul/Shuchi, Sanaeya, George, Vikram/Apoorva	Self S
	12.50 - 1.20	L U N		
	1.20 - 2.10	(UD+UC) (Working Studio)	Thesis II Ketaki, Sandeep, Ainsley, Jimmy	Self S
2.10 - 3.00				

Semester IV

Time-Table

WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Study	Sociological and Cultural Perspectives on Resilience (UD+UC) Binti Singh	Thesis Writing (UD + UC) Ginella Sarah Binti Ketaki Aditya	
Derpinnings-thesis Argument. (UD+UC) Sanaeya	Imaging Crisis (UD+UC) Rohan Shivkumar	Thesis II Manoj/Chaarvi, Shweta, Aditya, Ginella	
BREAK			
Study	Elective 4	Thesis II Paul/Shuchi, Sanaeya, George, Vikram/Apoorva	
N C H BREAK			
Study	(UD+UC) (Working Studio)	Thesis II Ketaki, Sandeep, Ainsley, Jimmy	

Urban Design

Choice Elective I: Imaging Crisis

Choice Elective II: Building Resilience Amongst Communities

Urban Conservation

Choice Elective I: Cultural Territories and Urban Resilience

Choice Elective II: Sociological and Cultural Perspectives on Resilience

KRVIA Masters: 2021-2022

SEMESTER: IV

THESIS II

Objectives

The final semester of the Masters in Urban Design is a reflective process focused on the learnings of the first three semesters. A professional is expected to have a position with regards to Urbanism and is encouraged to reflect, critique and validate one's position through background research, theoretical readings and academic paper writing that forms the backbone to structure the argument of the thesis. All of this is undertaken in the earlier semester and the fourth semester is envisaged as an opportunity to validate the inferences in a specific context. In this semester the proposition is based on one's own readings of the site and context to recommend either real or speculative interventions

Teaching Method

The trajectory for the Masters in Urban Conservation is similar to that of Urban Design and is conducted simultaneously without any distinction between streams.

This method facilitates a broader perspective for the professional. One may choose to focus on larger philosophical or theoretical issues relevant to the Indian context. This is demonstrated through the identification of an appropriate scale of an individual building or to a larger precinct.

Learning Outcomes

The learning outcome is a culmination of the masters program, which is geared towards young practitioners that have the ability to critically understand the context, to recommend real and speculative propositions, validated through theoretical positions.

SCHEDULE OF PROGRESS & JURIES

DATE	PROGRESS / REMARKS / TASKS	Grades
16/11/2021		
19/11/2021		
23/11/2021		
26/11/2021		
30/11/2021		
03/12/2021		

07/12/2021	Progress guide marking 1	10
10/12/2021		
14/12/2021		
17/12/2021		
04/01/2022		
07/01/2022		
11/01/2022	Progress guide marking 2	15
14/01/2022		
18/01/2022		
21/01/2022	Thesis Argument & Site Introduction-cross group jury	20
25/01/2022		
28/01/2022		
01/02/2022		
04/02/2022	Progress guide marking 3	15
08/02/2022		
11/02/2022	Thesis Argument & Site Analysis-cross group jury	20
15/02/2022		
18/02/2022		
22/02/2022	Site Analysis & Issues – I -cross group jury	20
25/02/2022		
01/03/2022		
04/03/2022	Progress guide marking 4	20
08/03/2022		
11/03/2022	Site Analysis & Issues – II -cross group jury	25
15/03/2022		
18/03/2022		
22/03/2022		
25/03/2022	Demonstration And Interventions- Exhibition Jury	20

29/03/2022		
01/04/2022	Progress guide marking 5	30
05/04/2022	Final cut-off external jury (This is tentative and subject to change depending on the date of the final jury)	50

CO-PO mapped syllabi of Masters in Urban Design and Architectural & Urban Conservation 2021-2022 – Thesis II

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpret learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorize and conceptualize ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

Programme outcomes:

- To acquire the ability to critically understand the context
- To be able to recommend real and speculative urban propositions
- To be able to validate urban interventions with theoretical positions
- To be able to achieve technical competency for the respective streams
- To undertake research for production of new knowledge

Course: Thesis II

University Course Code: MUDS401 / S4A

Sem- 4

Year -

Second

KRVIA Course Code: UDCT 71616 / UDCT 71515

Course Objectives:

- To have a position with regards to Urbanism
- To encourage reflecting, critique and validate one's position through background research, theoretical readings and academic paper writing.
- To structure the argument of the thesis.
- To validate the inferences in a specific context

Course Outcomes:

- Ability to critically review and build on existing literature for production of new knowledge.
- They will develop propositions based on one's own readings of the site and context to recommend either real or speculative interventions.
- The students will be equipped with an ability to validate urban propositions through theoretical positions.
- Equip the students to propose instruments for implementation in the urban realm.
- Develop methods and skills for appropriate representation using innovative techniques.

USM's Kamla Raheja Vidyavidhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task Assessment									
Grade									
Equivalent out of 10.0									
Area of Evaluation									
Site observations and ability to critically analyse the data gathered.	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair. Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
	Exceptional	Impressive	Meatulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of readings/ maps/ drawings/ case studies	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable
	Exceptional	Impressive							

CO-PO Mapping

	CO	PO1: Critical understa nding of context	PO2: Urban propositi oning	PO3: urban interventio ns with theoretical positions	PO4: Technica l Compete ncy	PO5: Creation of new knowledg e
CO1	Ability to critically review and build on existing literature for production of new knowledge.	1	1	2	2	3
CO2	They will develop propositions based on one's own readings of the site and context to recommend either real or speculative interventions.	3	3	3	2	2
CO3	The students will be equipped with an ability to validate urban propositions through theoretical positions.	3	2	2	2	2
CO4	Equip the students to propose instruments for implementation in the urban realm.	2	3	3	3	2
CO5	Develop methods and skills for appropriate representation using innovative techniques.	1	2	3	3	2

1 – Slight (Low) Correlation
Correlation

2- Moderate (Medium) Correlation
0 – No Correlation

3- Substantial (high)

Cultural Territories and Urban Resilience 21-22 – Manoj Parmar

Objective

The course attempts to decode the various cultural territories that are operative functionally as well as spatially within various cities in India. The course attempts to acknowledge and recognize such territories and makes an argument that such territories are central to various urban discourses that recognizes the liveability indexes and sustainability of such characters of the city.

Schedule

	Content	Mode
03-01-22	Introduction to Cultural Territories	Video Recording + Discussion
10-01-22	Discussing Frameworks of Resilience	Video Recording + Discussion
17-01-22	Towards a cultural framework for comprehending resilience	Video Recording + Discussion
24-01-22	Citi Culture Reader	Book Review + Discussion
31-01-22	Cultural Paradigm and Southern Urbanism	Book Review + Discussion
07-02-22	Students Presentation	Presentation

Submission

The student would work in groups and select city or areas within the city to build the argument of formation of such territories. The first phase of the study is to discuss the method of mapping such territories and various parameter that influences the formation of such territories. The second phase shall discuss the various resilience framework that could be mobilized to conserve such territories.

References

Montgomery, John. <https://www.tandfonline.com/doi/pdf/10.1080/1561426042000215614A> *conceptual analysis of livelihoods and Resilience: addressing the 'insecurity of agency'* - Adam Pain and Simon Levine

https://www.researchgate.net/publication/237610191_Cultural_Quarters_as_Mechanisms_for_Urban_Regeneration_Part_1_Conceptualising_Cultural_Quarters

<https://collectiveimpactlab.com/2008/01/09/the-four-types-of-cultural-quarters-progressively-speaking/>

<https://www.amazon.in/City-Cultures-Reader-Routledge-Urban/dp/0415302455>

<https://www.goodreads.com/book/show/59148606-resilience-and-southern-urbanism>

CO-PO mapped syllabi of Masters in Urban Design

Masters in Architectural & Urban Conservation 2021-2022 – Choice Elective 1 (Cultural Territories & Cultural Resilience)

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

Programme outcomes:

1. To acquire the ability to critically understand the context.
2. To be able to recommend real and speculative urban propositions.
3. To be able to validate urban interventions with theoretical positions.
4. To be able to achieve technical competency for the respective streams.
5. To undertake research for production of new knowledge.

Course: Choice Elective 1 (Cultural territories and Cultural resilience)

University Course Code: E4a

Sem- 4

Year - Second

KRVIA Course Code: UDC 744.1

Course Objectives:

1. The course attempts to decode the various cultural territories that are operative functionally as well as spatially within various cities in India.
2. The course attempts to acknowledge and recognize such territories and makes an argument that such territories are central to various urban discourses that recognizes the livability indexes and sustainability of such characters of the city.

Course Outcomes:

1. What are cultural territories, what makes great cultural cities, and how it helps understanding the urban form.
2. What governs the conceptualization of cultural quarters & how it establishes meaningful relation with place geography.
3. How the social, cultural, and economic aspects of a place bring and inform the variety in cultural settings of the place.
4. How do you establish the framework of interrelationship and represent the cultural territories?

CO-PO Mapping:

CO	PO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	What are cultural territories, what makes great cultural cities, and how it helps understanding the urban form.	3	1	1	2	2
CO2	What governs the conceptualization of cultural quarters & how it establishes meaningful relation with place geography.	3	2	2	2	2
CO3	How the social, cultural, and economic aspects of a place bring and inform the variety in cultural settings of the place.	3	1	2	2	2
CO4	How do you establish the framework of interrelationship and represent the cultural territories?	3	2	2	3	2

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation
 0 – No Correlation

Negotiating with Hard and Soft City

Looming challenges and risks in contemporary urban society worldwide cannot be single-handedly solved by the city government machinery or municipal authorities and the components of the hard city. Imminent urban challenges like climate change risks, disasters, environmental degradation, solid waste management, resource management calls for collaborative action engaging all urban stakeholders and soft city dimensions. The role of an informed citizenry cannot be undermined in this narrative. People's choices and decision making are best when they are backed by experience, information and feedback embedded in social contexts reflected in cultural practices. Human beings are not rational-legal but emotive, affective, and are embedded in cultural and societal practices. It is profitable to understand the myriad life situations of people in their day-to-day encounters with the city to make policies work in the city context. In his book 'Someone to Talk to' published in 2017, Harvard sociologist Mario Luis Small highlights the increasing social ties in a highly networked world and how cognitive empathy is a driving force behind many of people's actions flipping the argument that human beings are always cautious, rational and motivated by self-protection. Based on several examples and works of contemporary urbanists like Jan Gehl, Fred Kent, Charles Wolfe, William Whyte, this elective will highlight the importance of the soft city in contemporary urban life. The elective will also tie up these contemporary experiments of the soft city (both in India and globally) with the phenomenological construct of the life world and its importance in informing urban design and planning.

Lecture1: 19/09/2022

Introduction

Lecture 2: 26/09/2022

Jan Gehl and Life between Buildings

Lecture 3 : 3/10/2022

David Sim and his experiments in Copenhagen

Lecture 4 : 10/10/2022

William Whyte, Street Corner Society

Lecture 5: 17/10/2022

William Whyte, The Social Life of Small Urban Places

Lecture 6: 21/11/2022

Students interaction

Lecture 7: 28/11/2022

Introduction to Binti Singh's book on Negotiating Resilience with Hard and Soft City,

Lecture 9: 12/12/2022

What is life world?

Lecture 10: 19/12/2022

How does lifeworld inform urban life ?

Lecture 11: 02/01/2023

What is Nudge?

Lecture 12: 09/01/2023

Examples in City life

Lecture 13: 16/01/2023

Students work on assignment, visit site

Lecture 14: 23/01/2023

Presentation and peer review

Resources

1. <https://theurbanmycelium.com/>
2. <https://www-sociallifeproject-org.cdn.ampproject.org/c/s/www.sociallifeproject.org/who-owns-the-intersection-defines-the-social-life-of-a-city-or-the-revised-street-as-places-or-street-life-project/amp/>
3. [Sustaining a city's Culture and Character- Chuck Wolfe the method of LEARN](#)
4. [Tactical Urbanism](#)
5. <https://www.youtube.com/watch?v=oFkxoDUgcwU> Jan Gehl and David Sim
6. How Will India Fix her Urban Futures?
7. <http://davidharvey.org/reading-capital/>
8. [How to build a good city https://www.youtube.com/watch?v=9_x5Hor2MP8](https://www.youtube.com/watch?v=9_x5Hor2MP8)

CO-PO mapped syllabi of master's in urban design/ Urban Conservation 2021-2022

Choice based Elective - 2

Negotiating with Hard and Soft City

Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpret learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

Programme outcomes:

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

University Course Code: Urban Conservation Code (E4B)

Sem- 4 Year - Second Year

KRVIA Course Code: UDC 744.2

Course Objectives:

Looming challenges and risks in contemporary urban society worldwide cannot be single-handedly solved by the city government machinery or municipal authorities. Imminent urban challenges like climate change risks, disasters, environmental degradation, solid waste management, resource management calls for collaborative action engaging all urban stakeholders. The role of an informed citizenry cannot be undermined in this narrative. People's choices and decision making are best when they are backed by experience, information and feedback embedded in social contexts reflected in cultural practices. Human beings are not rational-legal but emotive, affective, and are embedded in cultural and societal practices. It is profitable to understand the myriad life situations of people in their day-to-day encounters with the city to make policies work in the city context. In his book 'Someone to Talk to' published in 2017, Harvard sociologist Mario Luis Small highlights the increasing social ties in

a highly networked world and how cognitive empathy is a driving force behind many of people's actions flipping the argument that human beings are always cautious, rational and motivated by self protection.

1. Based on several examples and works of contemporary urbanists like Jan Gehl, Fred Kent, Charles Wolfe, Willaim Whyte, this elective will highlight the importance of the soft city in contemporary urban life.
2. The elective will also tie up these contemporary experiments of the soft city (both in India and globally) with the phenomenological construct of the life world and its importance in informing urban design and planning.

Course Outcomes (CO):

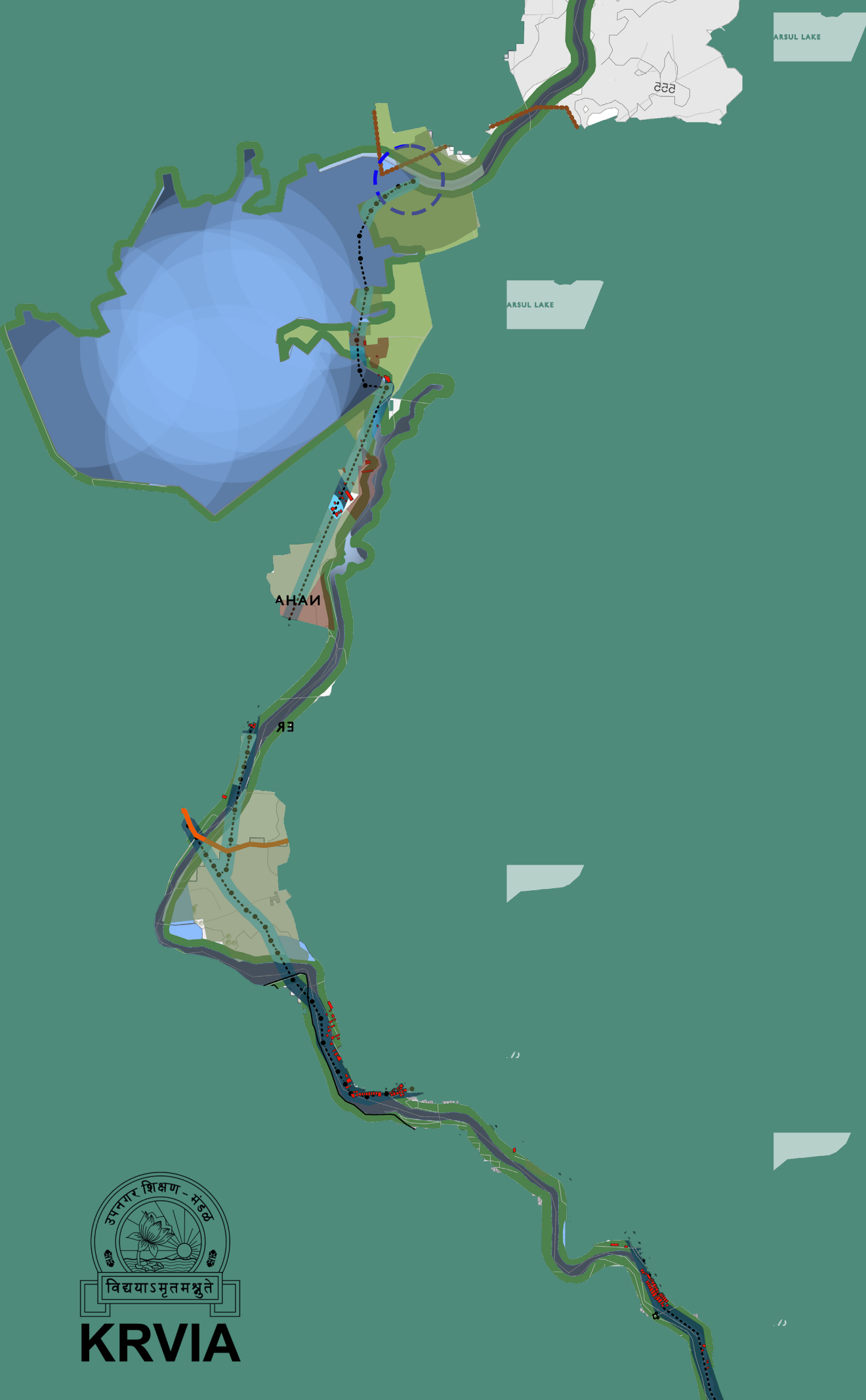
- Students are expected to fathom the complexity of how citizens through their everyday experiences negotiate the hard and soft cities
- Students will be able to discern the invisible layers and patterns of urban life embedded in culture
- Students will be able to represent these soft/hard city dimensions in various ways- writings, videos, maps and policy recommendations

USM's Kamla Raheja Vidyavidhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task									
Assessment Grade	O++	O+	O	Excellent A	Very Good B	Good C	Fair D	Satisfactory E	Fail F
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
Area of Evaluation									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe/ un-disputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
Rigour of data collection/collation/ and curation. for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map, drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

CO-PO Mapping:

	CO	PO1: Critical understa nding of context	PO2: Urban propositi oning	PO3: urban interventi ons with theoretica l positions	PO4: Technica l Compete ncy	PO5: Creation of new knowledge
CO 1	Students are expected to fathom the complexity of how citizens through their everyday experiences negotiate the hard and soft cities	3	2	2	1	2
CO 2	Students will be able to understand and discern the invisible layers and patterns of urban life embedded in culture	3	3	3	1	2
CO 3	Students will be able to represent these soft/hard city dimensions in various ways- writings, videos, maps and policy recommendations	3	3	3	1	2

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high)
Correlation 0 – No Correlation



KRVIA