

ANNA UNIVERSITY, CHENNAI
NON-AUTONOMOUS COLLEGES AFFILIATED TO ANNA UNIVERSITY
M. ARCH. (URBAN DESIGN) FULL-TIME PROGRAMME
REGULATIONS 2021
CHOICE BASED CREDIT SYSTEM
I TO IV SEMESTERS CURRICULA AND I SEMESTER SYLLABUS

SEMESTER I

S. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.	UR4101	History and Theory of Urban Design	PCC	3	0	0	3	3
2.	UR4102	Urban Planning: Policy and Practice	PCC	3	0	0	3	3
3.	UR4103	Urban Heritage and Conservation	PCC	3	0	0	3	3
4.	UR4191	Social Theory and the City	PCC	3	0	0	3	3
5.		Audit Course I*	AC	2	0	0	2	0
THEORY CUM STUDIO								
6.	UR4121	Urban Analysis and Diagramming	PAEC	1	0	3	4	4
STUDIO								
7.	UR4111	Urban Design Studio I	PCC	0	0	10	10	10
TOTAL				15	0	13	28	26

* Audit Course is optional

SEMESTER II
(Prerequisite- Pass in Urban Design Studio I)

S. NO.	COURSE CODE	COURSE TITLE	CATE- GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.	RM4251	Research Methodologies for Built Environment	RMC	3	0	0	3	3
2.	UR4201	Urban Housing: Types and Practice	PCC	3	0	0	3	3
3.	UR4202	Urban Form performance and Simulation Audit	PCC	3	0	0	3	3
4.		Audit Course II*	AC	2	0	0	2	0
THEORY CUM STUDIO								
5.	MH4221	Geographical Information Systems for Built Environment	PAEC	1	0	3	4	4
STUDIO								
6.	UR4211	Urban Design Studio II	PCC	0	0	10	10	10
TOTAL				12	0	13	25	23
PROFESSIONAL ELECTIVE								
		Professional Elective I	PEC	X	X	X	3	3
TOTAL							28	26

* Audit Course is optional

SEMESTER III
(Prerequisite- Pass in Urban Design Studio II)

S. NO.	COURSE CODE	COURSE TITLE	CATE- GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.	UR4301	Sustainable Urban Development	PCC	3	0	0	3	3
2.	UR4302	Urban Design: Practice and Processes	PCC	3	0	0	3	3
STUDIO								
3.	UR4311	Dissertation	PCC	0	0	4	4	4
4.	UR4312	Urban Design Studio III	PCC	0	0	10	10	10
TOTAL				6	0	14	20	20
PROFESSIONAL ELECTIVE								
5.		Professional Elective II	PEC	X	X	X	3	3
6.		Professional Elective III	PEC	X	X	X	3	3
INTERNSHIP TRAINING								
7.	UR4313	Internship Training	PAEC	X	X	X	X	2
TOTAL								28

SEMESTER IV
(Prerequisite- Pass in Urban Design Studio III)

S. NO.	COURSE CODE	COURSE TITLE	CATE- GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
STUDIO								
1.	UR4411	Thesis Project	PCC	0	0	20	20	20
			TOTAL	0	0	20	20	20
PROFESSIONAL ELECTIVE								
2.		Professional Elective IV	PEC	X	X	X	3	3
TOTAL							23	23

TOTAL NO. OF CREDITS: 103

PROFESSIONAL CORE COURSES (PCC)

S. NO.	COURSE CODE	COURSE TITLE	CATE- GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.	UR4101	History and Theory of Urban Design	PCC	3	0	0	3	3
2.	UR4102	Urban Planning: Policy and Practice	PCC	3	0	0	3	3
3.	UR4103	Urban Heritage and Conservation	PCC	3	0	0	3	3
4.	UR4191	Social Theory and the City	PCC	3	0	0	3	3
5.	UR4111	Urban Design Studio I	PCC	0	0	10	10	10

6.	RM4251	Research Methodologies for Built Environment	RMC	3	0	0	3	3
7.	UR4201	Urban Housing: Types and Practice	PCC	3	0	0	3	3
8.	UR4202	Urban Form Performance and Simulation Audit	PCC	3	0	0	3	3
9.	UR4211	Urban Design Studio II	PCC	0	0	10	10	10
10.	UR4301	Sustainable Urban Development	PCC	3	0	0	3	3
11.	UR4302	Urban Design: Practice and Processes	PCC	3	0	0	3	3
12.	UR4311	Dissertation	PCC	0	0	4	4	4
13.	UR4312	Urban Design Studio III	PCC	0	0	10	10	10
14.	UR4411	Thesis Project	PCC	0	0	20	20	20

PROFESSIONAL ELECTIVE COURSES (PEC)

SEMESTER II, ELECTIVE I

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	UR4071	Culture of Public Spaces	PEC	3	0	0	3	3
2.	UR4072	Quantitative Techniques and Data Representation	PEC	3	0	0	3	3
3.	MH4073	Soft Skills	PEC	2	0	1	3	3

SEMESTER III, ELECTIVE II & III

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	UR4001	City Form Development in Asia	PEC	3	0	0	3	3
2.	UR4002	Human Settlements	PEC	3	0	0	3	3
3.	UR4003	Urban Infrastructure : Resources And Resilience	PEC	3	0	0	3	3
4.	UR4004	Coding for Urban Design	PEC	1	0	2	3	3
5.	UR4005	Urban Economics, Sociology and Management	PEC	3	0	0	3	3
6.	MH4074	Psychology of Learning and Development	PEC	3	0	0	3	3

SEMESTER IV, ELECTIVE IV

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	UR4006	Urban Landscapes	PEC	3	0	0	3	3
2.	UR4007	Urban Transportation Systems	PEC	3	0	0	3	3
3.	UR4008	Disaster Prevention and Mitigation in Cities	PEC	3	0	0	3	3
4.	MH4075	Theory of Architectural Education	PEC	3	0	0	3	3

PROFESSIONAL ABILITY ENHANCEMENT COURES (PAEC)

S. NO.	COURSE CODE	COURSE TITLE	CATE-GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.	UR4121	Urban Analysis and Diagramming	PAEC	1	0	3	4	4
2.	MH4221	Geographical Information Systems for Built Environment	PAEC	1	0	3	4	4
3.	UR4313	Internship Training	PAEC	X	X	X	X	2

AUDIT COURSES (AC)

Registration for any of these courses is optional to students

SL. NO	COURSE CODE	COURSE TITLE	PERIODS PER WEEK			CREDITS	SEMESTER
			Lecture	Tutorial	Practical		
1.	AX4091	English for Research Paper Writing	2	0	0	0	1/2
2.	AX4092	Disaster Management	2	0	0	0	
3.	AX4093	Constitution of India	2	0	0	0	
4.	AX4094	நற்றமிழ் இலக்கியம்	2	0	0	0	

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PROGRESS THROUGH KNOWLEDGE

OBJECTIVES

- To give comprehensive understanding of development of urban form and its determinant factors in global and Indian contexts.
- To introduce and enable understanding of various aspects of urbanism through historical and theoretical frameworks
- To understand historical significance of urban design interventions.

UNIT I INTRODUCTION**6**

Introduction to origin and evolution of cities: form and urbanism. Normative, positive theories; Cosmic, Machine & Organic Models; Descriptive & functional theories.

UNIT II EVOLUTION OF URBAN FORM- GLOBAL CONTEXT**10**

Early Cities - classical urban form. Medieval towns. Renaissance urban form and ideal cities. Industrialization, colonialism and model settlements. Reconfiguration Paris, London, Vienna, Barcelona. Modernism, Modernity and ideal settlement form. American grid-iron planning-City Beautiful. Organic cities. CIAM IV and the zoned city. Post war, post-colonial city form, zoned city and place. Urban renewal and community. Mixed use. Development of suburbs, Impact of safety concerns, sustainability, globalization and technology on urban form.

UNIT III EVOLUTION OF URBAN FORM – INDIAN CONTEXT**10**

Early settlements (Indus Valley, southern peninsula, Indo Gangetic plain). Indian notions of space from epics, literature and treatises. Temple towns and ports of Tamizhagam (Kanchipuram, Muziris). City form during Magadha and Gupta Periods (Pataliputra, Varanasi). Medieval cities (Hampi, Jaipur). Mughal urban form (Shahjehanabad, Srinagar). Early colonial settlements (Madras, Pulicat, Goa). Colonial space types and urban form (Calcutta, New Delhi, Darjeeling). Zoned cities (Bhubaneswar and Gandhi Nagar). Industrial towns (Jamshedpur). Zoned layouts (Anna Nagar-Chennai, Whitefield - Bengaluru). Globalization and Indian cities

UNIT IV MODERN AND POST-MODERN URBANIST THEORIES**10**

Theories of visual-artistic and socialist tradition - Cullen's townscape theories. Three theories of urban design: figure ground, networks and place. Lynch's ideas of good city form and image-ability. Phenomenology - architecture of the city - responsive environments. Claire Cooper Marcus and behavioral studies. Public and private domains. Suburbs and periphery- privacy, territoriality and proximities theory - responsive environments - defensible spaces- community design. Social life of urban spaces. Life between buildings - right to city - gender, class and city. Jane Jacobs - Death and life of great American cities. Futuristic cities. Charles Correa: Housing and Urbanization, National Commission for Urbanization report, 1989. New urbanism

UNIT V CONTEMPORARY URBAN INTERVENTIONS**9**

Contemporary Urban condition and future of cities: globalization and local culture, climate change, sustainability and urban resilience. Transportation and city infrastructure. Communication, big data and automation overlay - contemporary processes in urban design - place and public realm in the digital age-participatory design

TOTAL: 45 PERIODS**OUTCOMES**

- Knowledge of evolution of global and Indian urban form
- Ability to comprehend historical and theoretical frameworks to address contemporary urban issues.
- Understanding on the historical significance of urban design interventions in global urban scenario.

REFERENCES

1. Morris, A.E.J. History of Urban Form before the Industrial Revolution. Prentice Hall, 1996
2. Carmona, Mathew et.al. Public Places Urban Spaces: The Dimensions of Urban Design. Oxford: The Architectural Press, July 2010
3. Bacon, Edmund. Design of Cities. London: Penguin, 1976
4. Cullen, Gordon. The Concise Townscape. Oxford: The Architectural Press, 1978
5. Kostof, Spiro. The City Assembled. London: Thames & Hudson, 2005
6. Kostof, Spiro. The City Shaped. London: Thames & Hudson, 1991
7. Jon Lang. Urban Design: A Typology of procedures and products. Oxford: The Architectural Press, 2017
8. Correa, Charles. Housing and Urbanization. London: Thames & Hudson, 1999
9. Ali Madanipour Ed., Who's Public Space? International Case studies in Urban design and development, Abingdon-On-Thames: Routledge, 2009
10. Chakrabarti K, Dilip. The Archaeology of Ancient Indian Cities. New Delhi: Oxford University Press, India, 1995
11. Waddell, L. Report on the excavations at Pātaliputra Paperback. Book on Demand Ltd., 2013
12. Champakalakshmi. R. Trade, Ideology and Urbanization. New Delhi: Oxford University Press, 1997
13. Lynch, Kevin. Good City Form. Cambridge: MIT PRESS, 1984
14. Lynch, Kevin. The Image of the City. Cambridge: MIT PRESS, 1960.
15. Rithchie. A. Sustainable Urban Design: An Environmental Approach. Abingdon: Taylor & Francis, 2000.
16. Barnett, Jonathan. An Introduction to Urban Design. New York: Harper Row, 1982
17. Broadbent, Geoffrey. Emerging Concepts in Urban Space Design. Abingdon: Taylor & Francis, 2003.
18. Gosling and Maitland. Urban Design. New York: St. Martin's Press, 1984

UR4102

URBAN PLANNING: POLICY AND PRACTICE

L T P/S C
3 0 0 3

OBJECTIVES

- To give awareness about the principles of urban planning
- To present a critical overview of relevant urban planning policies, techniques and methods, planning processes and their impact on urban growth, development & infrastructure.
- To give exposure to different aspects of data, planning standards, models and projections.

UNIT I PLANNING THEORIES AND DEFINITIONS

9

Planning glossary. Planning theories and applications in settlement planning. Types of plans: Master Plans, development plans, structure plans, physical, economic and social plans. Planning scales: regional, city, zonal, area, planned unit development schemes. Theories of physical planning: center-place theory, gravity model, primate cities.

UNIT II DATA BASE FOR PHYSICAL SURVEYS

10

Data base for physical surveys including land use, building use, density, building age, etc., and socio- economic surveys. Sampling and survey techniques. Land use classification or coding. Preparation of base maps: concepts of scales, components and detailing for various levels of plans (like regional plan, city plan, zoning plan, and local area plan). Classification, delineation and ranking of regions and settlements - Guttman's Scalogram. Desire line diagrams, Threshold analysis. Input output analysis, SWOT analysis. Planning models (descriptive and decision making models). Methods of population forecasts and projections: urban- rural, urban concentration, metropolitan concentration, location dimensions of population groups- social area and strategic choice approach. Interconnected decision area analysis.

UNIT III SPATIAL STANDARDS

9

Spatial standards, performance standards and benchmarks, and variable standards in applicable scenarios. URDPFI guidelines - Zoning regulations/ordinances and DCR and (development control rules and regulations). Emerging techniques in settlement planning: land management techniques, Land pooling, land assembly, PRT (Plot reconstitution techniques), land readjustment, transfer of development rights.

UNIT IV TECHNIQUES AND APPROACHES IN URBAN PLANNING

8

Various approaches to urban land zoning: mixed zone, floating zone, white zoning etc. TOD (Transit Oriented Development). New Urbanism and PIU (Principles of Intelligent Urbanism). Public participation in planning process. Regional urban resilient planning to address climate change and global emergencies.

UNIT V URBAN INFRASTRUCTURE

9

Concepts of urban infrastructure-social, physical, health Infrastructure. Urban form-size implications for services integration. Infrastructure overlay in PUDs - services and utilities network - qualitative and quantitative assessment for assessment of demand - supply - water supply, sewerage/drainage and waste management-communication and transit networks & urban social Infrastructure. Infrastructure development financing models and emerging options.

TOTAL: 45 PERIODS

OUTCOMES

- An understanding of various urban planning principles, facets, types, scales, theories and regulations
- Familiarity with urban planning frameworks, tools, methodology and applications in contemporary situations.

REFERENCES

1. S K Kulshrestha, Urban and Regional Planning in India: A Handbook for Professional Practice. New Delhi, Sage Publications, 2012
2. Susan S. Fainstein (Editor), James DeFilippis (Editor). Readings in Planning Theory- 4th Edition, Hoboken: Wiley Blackwell, 2016
3. Eugénie, Birch. The Urban and Regional Planning, Abingdon-On-Thames: Routledge, 2008
4. Faludi, Andrea. A reader in planning theory. Oxford, New York: Pergamon Press, 1973
5. Kruekeberg, Donald and Arthur Silvers, Arthur. Urban Planning Analysis: Methods and Models. Hoboken: John Wiley, 1974
6. Braken, Ian. Urban Planning Methods. Abingdon-On-Thames: Routledge, 2006
7. Ratcliffe, John. An Introduction to Town and Country Planning (Living Environment). Cheltenham: NelsonThornes Ltd, 1981
8. B. Keeble, Lewis. Principles and Practice of Town and Country Planning. Estates Gazette Ltd.
9. Margaret. An introduction to Town planning Techniques. Hutchinson Educational, Hutchinson
10. Cliff Moughtin. Urban Design Methods and Techniques. Elsevier, 2003
11. Das, Amiyakumar, Urban Planning in India, Rawat Pubns; illustrated edition, 2007.
12. Urban and regional development plans formulation and implementation (URDPFI) guidelines, Government of India, Ministry of Urban Development – Volume

OBJECTIVES

- To introduce the idea of conservation as value addition to city life, place, memory and identity
- To enable understanding of the importance of conserving building heritage, historic precincts & natural heritage
- To give awareness of conservation strategies & legislature, in preserving the essence of a heritage structure or precinct

UNIT I INTRODUCTION TO CONSERVATION**6**

Understanding the need for heritage conservation. Types of Heritage. Introduction to Conservation, preservation and adaptive reuse of buildings and historic districts.

UNIT II CONSERVATION STRATEGIES**10**

Listing of monuments. Documentation of historic structures: assessing architectural character, building material audit. Historic report- Guidelines for preservation, rehabilitation and adaptive reuse of historic structures. Seismic retrofit. Differently-abled access /services additions to historic buildings. Heritage site management. Conservation management. Concepts of integrated conservation, sustainable conservation, in-situ conservation. Case studies of global and Indian projects.

UNIT III HISTORIC DISTRICTS AND HERITAGE TOURISM**10**

Historic districts: Understanding characteristics and issues of historic districts, places and cities. Mapping, documentation and development guidelines. Overlay with new age urban infrastructure. Heritage tourism circuits management and master plan. Case studies: Varanasi, Bodhgaya, Thanjavur, Goa, Pondicherry, Aleppo, Rome, Jerusalem, Bath, Beijing, Paris, Istanbul, Galle, Bhutan and Ladakh.

UNIT IV URBAN ECOLOGY AND NATURAL HERITAGE**10**

Urban Ecology. Riparian corridors. Wetlands and urban lakes, urban forests. Coast preservation - code compliance. Case study of Nanmangalam, Guindy national park, Pallikaralai, Mambakkam Lake. Code compliance with Ministry of Environment's legislation and recommendations.

UNIT V CONSERVATION LEGISLATION**9**

Central and state government policies and legislation. Role of Conservation Agencies and conventions: ICOMOS, ICCROM, UNESCO, ASI, INTACH, ICHN. Charters and trends in conservation: Florence Charter, Burra charter. Norms for conservation of heritage buildings and sites as part of development regulations, Heritage byelaws and special conditions. Heritage impact assessment. Community heritage leverage legislation such as LEASE Act, RENT Control Act & CESS and TDR. Government of India heritage programs such as HRIDAY and PRASAD.

TOTAL: 45 PERIODS**OUTCOMES**

- An understanding of the role of conservation & identity in burgeoning cities.
- Familiarity with conservation types, strategies & legislation.
- Ability to use critical conservation frameworks for evaluating historical buildings and districts, urban ecology and propose strategies for preservation, conservation and adaptive reuse.

REFERENCES

1. PEARL. Urban heritage in Indian Cities. New Delhi: INTACH publications, 2015
2. Ed Cody and Siravo. Historic Cities: Issues in urban Conservation. Los Angeles: Getty Publications.2019
3. Appleyard, Donald. The Conservation of European Cities. Cambridge: MIT Press, 1979
4. M. Fitch, James. Historic Preservation: Curatorial Management of the Built World. Charlottesville: University of Virginia Press, 1990

5. Fielden, Bernard and E. Stipe, Robert. A Richer Heritage: Historic Preservation in the Twenty – First Century. Chapel Hill: University of North Carolina Press, 2003
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7. Brereton, Christopher. The Repair of Historic Buildings: Advice on principles and methods (Aspects of Conservation). London: Historic England, 1995
8. M.S.Mathews. Conservation Engineering (Restoration of Historic Monuments: Suggestions for Practice). Karlsruhe: Universität Karlsruhe, 1998

UR4191

SOCIAL THEORY AND THE CITY

L T P/S C

3 0 0 3

OBJECTIVES

- To give critical understanding of the city and its underlying forces through various social theories
- To give awareness of urban processes through political, economic, social and cultural lenses.
- To give knowledge about the role of people and culture in city identity.

UNIT I CITY, CULTURE AND ITS IDENTITY

9

Understanding city culture. Theories of Socio-cultural memory. Understanding visual culture. Urban and cultural anthropology. Contemporary Urban issues. City and Identity. Theories of Margaret Mead, Levi Strauss, Saskia Sassen, Claire Cooper Marcus, MSS Pandian, Malcom Adisheshaiah and Arjun Appadurai.

UNIT II HISTORIOGRAPHY AND THE CITY

9

Understanding authorized and subaltern histories of cities - society and cities in vernacular literature, folk tradition and popular art - post-colonial theories and histories of Indian Cities.

UNIT III POWER AND RESISTANCE IN THE CITY SPACES

9

Understanding the concept of power and its space manifestation in cities. Historic Indian Treatises: Chanakya Neeti, Harshacharitra, Ula, Uthirmerur inscriptions, Baburnama, Ain-i-Akbari. Theories of Giddens, Aldo Rossi, Corbusier, Oscar Niemeyer, Foucault. Case studies from New Delhi, Istanbul, Los Angeles, Jerusalem, Shenzhen

UNIT IV URBAN POLITICS

9

City and its people. Cities and social theory: Marxism, public realm theory, difference theory, critical theory. Spatial-social justice in the city. Spatial inequalities and urban form. Neoliberalism and the city. Globalization and urban spatial politics. Theories of Jane Jacobs, Pyatok, Newmann, Saskia Sassen. Case studies of Belfast, Berlin, Curitiba city, Caracas, Scandinavian cities, Mumbai -Lokhandwala region.

UNIT V GAZE IN THE CITY

9

Space and body: The Flâneur, gaze and urban public spaces. Tourist gaze, gender gaze, colonial gaze. Sexuality in urban space: feminista, queer, transgender, etc.

TOTAL: 45 PERIODS

OUTCOMES

- An understanding of the city and its underlying forces through various social theories.
- Ability to process city through political, economic, social and cultural lenses.
- Ability to understand the city in terms of people, community & identity.

REFERENCES

1. Ritzer, George. Postmodern Social Theory. Beijing: Beijing da xuechu ban she. 2004
2. Sharp, Kristen, and Elizabeth Grierson. Re-Imagining the City: Art, Globalisation and Public space. Bristol: Bristol: Intellect Books, 2013
3. Phadke, Shilpa and Khan, Sameera. Why Loiter? New Delhi: Penguin India, 2011
4. Montgomery, Charles. Happy City: Transforming our lives through Urban Design. London: Penguin, 2015
5. Said, Edward. Orientalism: Western Conceptions of the Orient. London: Penguin Publication, 1978
6. Rapoport, Amos. The meaning of the built environment. Tucson: The University of Arizona Press, 1982
7. Rapoport, Amos. House, Form and Culture. London: Pearson Education, 1969
8. Srivastava A.R.N. Essentials of Cultural Anthropology. New Delhi: Prentice Hall India Private Ltd, 2005

UR4121

URBAN ANALYSIS AND DIAGRAMMING

L T P/S C
1 0 3 4

OBJECTIVES

- To provide knowledge on visualising, diagramming, mapping and analysing urban form and place
- To enable understanding of the importance of data mining and its various methods.

UNIT I INTRODUCTION

12

Introduction to urban glossary. Basics of mapping- map types. Introductory exercise. Study of an urban transect with sketch-walks.

UNIT II COGNITIVE DIAGRAMMING AND BASE MAPS

12

Basics of mapping. Preparation of figure ground maps collating satellite images, GIS, area development maps, records and ground corroboration. Cognitive mapping of tangible and intangible layers: land-use, districts and boundaries, physical histogenesis, heritage fabric, program-movement, activity, nodes, thresholds-networks, pedestrian pathways, transit density, policy initiatives, population demographics, visual and non-visual clues, social memory, community narratives and place realms, soundscape, real estate dynamics, ecology and environmental factors, physical and social infrastructure.

UNIT III MAPPING WITH THEORY OVERLAYS

12

Exploring and analyzing selected urban sites with mapping overlays of urban theories (as filters) on figure ground diagrams and base maps: imageability, permeability, variety, legibility, built, natural and cultural landscapes, perception, monuments and dwelling, spatial syntax, heritage urban form, social life of small urban spaces, life between buildings, FARMAX. Urbanism in the age of climate change, defensible space, and infrastructural urbanism, urban flows, e-cities, e-bodies, globalization and local culture, livability.

UNIT IV DATA VISUALISATION

12

Envisioning information. Graphical representation of data. Ben fry's seven steps in creating data visualization: Acquire, Parse, Filter, Mine, Represent, and Refine, Interact. Visual interconnection of facts& ideas: Relationship facts, contacts, connections, time-series, relational graphics, data maps, multivariate designs, scales. Quantitative; discreet; continuous; categorized data to be visualized with graphics software. Visualizing data for various urban development indices and quotients such as livability, walkability, mobility, commuting, off-peak travelling, local business, health, resilience, happiness, urban stress, surveillance and SDG, sustainable development goals.

UNIT V DATA ANALYSIS

12

Detection of graphical deception: design variation vs. data variation. Sources of deception. Aesthetics and Data graphical displays. Urban data mining -extracting meaningful information from raw data through simple programming software, iterative data analysis and refinement for various urban development indices and quotients. Social media data analysis as a complementary tool for urban design

TOTAL: 60 PERIODS

OUTCOMES

- Ability to analyze and comprehend urban condition with mapping- diagramming tools and an array of urban glossary
- Ability to extract, visualize and analyse urban data using analytical tools, to understand and communicate urban development issues, indices and quotients.

REFERENCES

1. Allen, Stan. Points and Lines: Diagrams and Projects for the City. Oxford: The Architectural Press, 1999.
2. Bentley, Ian et.al. Responsive environments: a manual for designers. Oxford: The Architectural Press, 1985
3. Tschumi, Bernard. Notations: Diagrams and sequences. London: Artifice Press, 2014
4. McCandless, David. The visual miscellaneum: A colourful guide to the world's most consequential Trivia. New York: HarperCollins Publishers, 2009
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10. J. Mitchell, William. City of Bits: Space, Place and the infobahn. Cambridge: MIT PRESS, 1996.
11. Thomas A, Horan, Digital Places: Building our city of bits, Washington, DC.: Urban Land Institute, 200
12. Watson, Donald et.al. Time Saver Standards for Urban Design. New York: McGraw-Hill Education, 2003
13. G. Parolek, Daniel, Parolek, Karen and C. Cram, Paul. Form Based Codes. Hoboken: John Wiley, 2000
14. Rem Koolhaas Ed. Project on the City, Great Leap Forward. Cologne: Taschen, 2001
15. Ingels, Bjarke. Yes is more. Cologne: Taschen, 2009
16. Calthorpe, Peter. Urbanism in the age of Climate Change. Washington DC: Island Press, 2011
17. Banerjee Tridib, Loukaitou-Sideris Anastasia, Companion to Urban Design, Abingdon-On-Thames: Routledge 2014
18. Edward R. Tufte, The visual display of quantitative information. Cheshire: Graphic Press LLC, 2006.

OBJECTIVES

- To enable exploration of urban cores in flux and propose future scenarios for their development
- To enable exploration of opportunities to conserve, strengthen and revitalise city cores.

CONTENT

Most often, city cores have substantial historic building stock and a network of places intertwined with local culture. It is imperative that old city cores - their networks, street life, and community spaces are taken into consideration in infrastructure up gradation, public projects and real estate development. New development, community infrastructure and amenities should be sympathetic to the context of the local community, architectural heritage and equity and enrich city cores.

This studio seeks to address the role of transformative place making in the context of city cores.

Students will explore the selected area of study, through experiential mapping, physical mapping, and interviews, review of policy and regulations, application of urban design theories, frameworks, data visualization and models.

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Students will analyze various urban design parameters inclusive of:

- the role of historic districts, urban morphology and building types, places and landform types, in a city's socio-cultural identity
- urban design challenges in integrating transit, pedestrian, social, health and community infrastructure in historic fabric
- relationship between a building and public realm
- placing urban catalysts
- local cultural aspirations and notions of space-place
- safety, health and public space

Probable projects might include urban in-fills, urban catalysts, transit, and pedestrian and community infrastructure as modes for urban revitalization, conservation guidelines, and form-based code manuals for contextual transformation, cultural landscape and place making proposals.

TOTAL: 150 PERIODS

OUTCOMES

- Refined understanding of issues transforming urban cores
- Ability and skill to propose strategies for transformative contextual place making at historic precincts in flux.

REFERENCES

1. Ian Bentley ed. Responsive environments: a manual for designers. Oxford: The Architectural Press, 1988
2. Gosling and Maitland, Urban Design, New York: St. Martin's Press, 1989
3. Correa, Charles. Housing and Urbanization, London: Thames & Hudson, 1999
4. G. Parolek, Daniel, Parolek, Karen and C. Cram, Paul. Form Based Codes. Hoboken: John Wiley, 2000
5. Gehl, Jan. Life between Buildings: Using Public space. Washington, DC.: Island Press, 2011
6. Whyte, William. The Social Life of Small Urban Spaces. Project for Public Spaces, 2001
7. Lynch, Kevin. The Image of the City. Cambridge: MIT PRESS, 1960.

8. Broadbent, Geoffrey. Emerging Concepts in Urban Space Design. Abingdon: Taylor & Francis, 2003.
9. Norberg- Schulz, Christian. Towards a Phenomenology of Architecture. New York: Rizzoli, 1980
10. Watson, Donald et.al. Time Saver Standards for Urban Design. New York: McGraw-Hill Education, 2003
11. M. Fitch, James. Historic Preservation: Curatorial Management of the Built World. Charlottesville: University of Virginia Press, 1990
12. A.Goldsmith, Stephen. What We See: Advancing the Observations of Jane Jacobs. New York: New York University Press, 2010



AUDIT COURSES

AX4091

ENGLISH FOR RESEARCH PAPER WRITING

L T P C
2 0 0 0

OBJECTIVES

- Teach how to improve writing skills and level of readability
- Tell about what to write in each section
- Summarize the skills needed when writing a Title
- Infer the skills needed when writing the Conclusion
- Ensure the quality of paper at very first-time submission

UNIT I INTRODUCTION TO RESEARCH PAPER WRITING

6

Planning and Preparation, Word Order, Breaking up long sentences, Structuring Paragraphs and Sentences, Being Concise and Removing Redundancy, Avoiding Ambiguity and Vagueness

UNIT II PRESENTATION SKILLS

6

Clarifying Who Did What, Highlighting Your Findings, Hedging and Criticizing, Paraphrasing and Plagiarism, Sections of a Paper, Abstracts, Introduction

UNIT III TITLE WRITING SKILLS

6

Key skills are needed when writing a Title, key skills are needed when writing an Abstract, key skills are needed when writing an Introduction, skills needed when writing a Review of the Literature, Methods, Results, Discussion, Conclusions, The Final Check

UNIT IV RESULT WRITING SKILLS

6

Skills are needed when writing the Methods, skills needed when writing the Results, skills are needed when writing the Discussion, skills are needed when writing the Conclusions

UNIT V VERIFICATION SKILLS

6

Useful phrases, checking Plagiarism, how to ensure paper is as good as it could possibly be the first-time submission

TOTAL: 30 PERIODS

OUTCOMES

- CO1 – Understand that how to improve your writing skills and level of readability
CO2 – Learn about what to write in each section
CO3 – Understand the skills needed when writing a Title
CO4 – Understand the skills needed when writing the Conclusion
CO5 – Ensure the good quality of paper at very first-time submission

REFERENCES

1. Adrian Wallwork , English for Writing Research Papers, Springer New York Dordrecht Heidelberg London, 2011
2. Day R How to Write and Publish a Scientific Paper, Cambridge University Press 2006
3. Goldbort R Writing for Science, Yale University Press (available on Google Books) 2006
4. Highman N, Handbook of Writing for the Mathematical Sciences, SIAM. Highman's book 1998.

OBJECTIVES

- Summarize basics of disaster
- Explain a critical understanding of key concepts in disaster risk reduction and humanitarian response.
- Illustrate disaster risk reduction and humanitarian response policy and practice from multiple perspectives.
- Describe an understanding of standards of humanitarian response and practical relevance in specific types of disasters and conflict situations.
- Develop the strengths and weaknesses of disaster management approaches

UNIT I INTRODUCTION**6**

Disaster: Definition, Factors and Significance; Difference between Hazard And Disaster; Natural and Manmade Disasters: Difference, Nature, Types and Magnitude.

UNIT II REPERCUSSIONS OF DISASTERS AND HAZARDS**6**

Economic Damage, Loss of Human and Animal Life, Destruction Of Ecosystem. Natural Disasters: Earthquakes, Volcanisms, Cyclones, Tsunamis, Floods, Droughts And Famines, Landslides And Avalanches, Man-made disaster: Nuclear Reactor Meltdown, Industrial Accidents, Oil Slicks And Spills, Outbreaks Of Disease And Epidemics, War And Conflicts.

UNIT III DISASTER PRONE AREAS IN INDIA**6**

Study of Seismic Zones; Areas Prone To Floods and Droughts, Landslides And Avalanches; Areas Prone To Cyclonic and Coastal Hazards with Special Reference To Tsunami; Post-Disaster Diseases and Epidemics

UNIT IV DISASTER PREPAREDNESS AND MANAGEMENT**6**

Preparedness: Monitoring Of Phenomena Triggering a Disaster or Hazard; Evaluation of Risk: Application of Remote Sensing, Data from Meteorological And Other Agencies, Media Reports: Governmental and Community Preparedness.

UNIT V RISK ASSESSMENT**6**

Disaster Risk: Concept and Elements, Disaster Risk Reduction, Global and National Disaster Risk Situation. Techniques of Risk Assessment, Global Co-Operation in Risk Assessment and Warning, People's Participation in Risk Assessment. Strategies for Survival

TOTAL : 30 PERIODS**OUTCOMES**

- CO1: Ability to summarize basics of disaster
- CO2: Ability to explain a critical understanding of key concepts in disaster risk reduction and humanitarian response.
- CO3: Ability to illustrate disaster risk reduction and humanitarian response policy and practice from multiple perspectives.
- CO4: Ability to describe an understanding of standards of humanitarian response and practical relevance in specific types of disasters and conflict situations.
- CO5: Ability to develop the strengths and weaknesses of disaster management approaches

REFERENCES

1. Goel S. L., Disaster Administration And Management Text And Case Studies", Deep & Deep Publication Pvt. Ltd., New Delhi, 2009.
2. Nishitha Rai, Singh AK, "Disaster Management in India: Perspectives, issues and strategies "New Royal book Company, 2007.
3. Sahni, Pardeep Et. Al. , " Disaster Mitigation Experiences And Reflections", Prentice Hall Of India, New Delhi, 2001.

OBJECTIVES

Students will be able to:

- Understand the premises informing the twin themes of liberty and freedom from a civil rights perspective.
- To address the growth of Indian opinion regarding modern Indian intellectuals' constitutional
- Role and entitlement to civil and economic rights as well as the emergence nation hood in the early years of Indian nationalism.
- To address the role of socialism in India after the commencement of the Bolshevik Revolution in 1917 and its impact on the initial drafting of the Indian Constitution.

UNIT I HISTORY OF MAKING OF THE INDIAN CONSTITUTION

History, Drafting Committee, (Composition & Working)

UNIT II PHILOSOPHY OF THE INDIAN CONSTITUTION

Preamble, Salient Features

UNIT III CONTOURS OF CONSTITUTIONAL RIGHTS AND DUTIES

Fundamental Rights, Right to Equality, Right to Freedom, Right against Exploitation, Right to Freedom of Religion, Cultural and Educational Rights, Right to Constitutional Remedies, Directive Principles of State Policy, Fundamental Duties.

UNIT IV ORGANS OF GOVERNANCE

Parliament, Composition, Qualifications and Disqualifications, Powers and Functions, Executive, President, Governor, Council of Ministers, Judiciary, Appointment and Transfer of Judges, Qualifications, Powers and Functions.

UNIT V LOCAL ADMINISTRATION

District's Administration head: Role and Importance, Municipalities: Introduction, Mayor and role of Elected Representative, CEO, Municipal Corporation. Pachayati raj: Introduction, PRI: Zila Pachayat. Elected officials and their roles, CEO Zila Pachayat: Position and role. Block level: Organizational Hierarchy(Different departments), Village level: Role of Elected and Appointed officials, Importance of grass root democracy.

UNIT VI ELECTION COMMISSION

Election Commission: Role and Functioning. Chief Election Commissioner and Election Commissioners - Institute and Bodies for the welfare of SC/ST/OBC and women.

TOTAL: 30 PERIODS

OUTCOMES

Students will be able to:

1. Discuss the growth of the demand for civil rights in India for the bulk of Indians before the arrival of Gandhi in Indian politics.
2. Discuss the intellectual origins of the framework of argument that informed the conceptualization of social reforms leading to revolution in India.
3. Discuss the circumstances surrounding the foundation of the Congress Socialist Party[CSP] under the leadership of Jawaharlal Nehru and the eventual failure of the proposal of direct elections through adult suffrage in the Indian Constitution.
4. Discuss the passage of the Hindu Code Bill of 1956.

SUGGESTED READING

1. The Constitution of India, 1950(Bare Act), Government Publication.
2. Dr.S.N.Busi, Dr.B. R.Ambedkar framing of Indian Constitution, 1st Edition, 2015.
3. M.P. Jain, Indian Constitution Law, 7th Edn., Lexis Nexis, 2014.
4. D.D. Basu, Introduction to the Constitution of India, Lexis Nexis, 2015.

UNIT I

சங்க இலக்கியம்

6

1. தமிழின் துவக்க நூல் தொல்காப்பியம்
- எழுத்து, சொல், பொருள்
2. அகநானூறு (82)
- இயற்கை இன்னிசை அரங்கம்
3. குறிஞ்சிப் பாட்டின் மலர்க்காட்சி
4. புறநானூறு (95,195)
- போரை நிறுத்திய ஔவையார்

UNIT II

அறநெறித் தமிழ்

6

1. அறநெறி வகுத்த திருவள்ளுவர்
- அறம் வலியுறுத்தல், அன்புடைமை, ஒப்புறவு அறிதல், ஈகை, புகழ்
2. பிற அறநூல்கள் - இலக்கிய மருந்து
- ஏலாதி, சிறுபஞ்சமூலம், திரிகடுகம், ஆசாரக்கோவை (தூய்மையை வலியுறுத்தும் நூல்)

UNIT III

இரட்டைக் காப்பியங்கள்

6

1. கண்ணகியின் புரட்சி
- சிலப்பதிகார வழக்குரை காதை
சமூகசேவை இலக்கியம் மணிமேகலை
- சிறைக்கோட்டம் அறக்கோட்டமாகிய காதை

UNIT IV

அருள்நெறித் தமிழ்

6

1. சிறுபாணாற்றுப்படை
- பாரி முல்லைக்குத் தேர் கொடுத்தது, பேகன் மயிலுக்குப் போர்வை கொடுத்தது, அதியமான் ஔவைக்கு நெல்லிக்கனி கொடுத்தது, அரசர் பண்புகள்
2. நற்றிணை
- அன்னைக்குரிய புன்னை சிறப்பு
3. திருமந்திரம் (617, 618)
- இயமம் நியமம் விதிகள்
4. தர்மச்சாலையை நிறுவிய வள்ளலார்
5. புறநானூறு
- சிறுவனே வள்ளலானான்
6. அகநானூறு (4) - வண்டு
நற்றிணை (11) - நண்டு
கலித்தொகை (11) - யானை, புறா
ஐந்திணை 50 (27) - மான்
ஆகியவை பற்றிய செய்திகள்

1. உரைநடைத் தமிழ்,
 - தமிழின் முதல் புதினம்,
 - தமிழின் முதல் சிறுகதை,
 - கட்டுரை இலக்கியம்,
 - பயண இலக்கியம்,
 - நாடகம்,
2. நாட்டு விடுதலை போராட்டமும் தமிழ் இலக்கியமும்,
3. சமுதாய விடுதலையும் தமிழ் இலக்கியமும்,
4. பெண் விடுதலையும் விளிம்பு நிலையினரின் மேம்பாட்டில் தமிழ் இலக்கியமும்,
5. அறிவியல் தமிழ்,
6. இணையத்தில் தமிழ்,
7. சுற்றுச்சூழல் மேம்பாட்டில் தமிழ் இலக்கியம்.

TOTAL : 30 PERIODS

தமிழ் இலக்கிய வெளியீடுகள் / புத்தகங்கள்

1. தமிழ் இணைய கல்விக்கழகம் (Tamil Virtual University)- www.tamilvu.org
2. தமிழ் விக்கிப்பீடியா (Tamil Wikipedia)-<https://ta.wikipedia.org>
3. தர்மபுர ஆதின வெளியீடு
4. வாழ்வியல் களஞ்சியம் - தமிழ்ப் பல்கலைக்கழகம், தஞ்சாவூர்
5. தமிழ்கலைக் களஞ்சியம் - தமிழ் வளர்ச்சித் துறை (thamilvalarchithurai.com)
6. அறிவியல் களஞ்சியம் - தமிழ்ப் பல்கலைக்கழகம், தஞ்சாவூர்

