

SYLLABUS

MASTER OF ARCHITECTURE M.Arch. (CITY DESIGN)

SUGGESTED COURSE STRUCTURE & CURRICULUM

2007-09

FEBRUARY 10, 2006

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.

MASTER'S OF ARCHITECTURE IN CITY DESIGN

1ST YEAR

SEMESTER I

18 WEEKS + 2 WEEK BREAK

MARCH, 2005

SUBJECT CODE		SUBJECT	CREDITS	PRE-REQUISITE
C 101	STUDIO I	URBAN STUDIES & DESIGN	10	
C 102	THEORY	HISTORY & EVOLUTION OF CITY PLANNING	3	
C 103	THEORY	LANDUSE AND TRANSPORTATION PLANNING	3	
C 104	THEORY	HOUSING, COMMUNITY PLANNING & POLICIES	3	
S 105	SEMINAR	SPACE, CULTURE & URBAN DESIGN	3	
E 106	THEORY	REMOTE SENSING AND GIS	2	
		TOTAL	24	

SEMESTER II

18 WEEKS + 2 WEEK BREAK

SUBJECT CODE		SUBJECT	CREDITS	PRE-REQUISITE
C 201	STUDIO II	NEW URBAN EXTENSIONS	12	C 101
C 202	THEORY	PLANNING LEGISLATION & PROFESSIONAL PRACTICE	3	
C 203	THEORY	URBAN INFRASTRUCTURE	3	
C 204	SEMINAR	URBAN CONSERVATION	2	
C 205	THEORY	ENVIRONMENT & CITY DEVELOPMENT	2	
E 206	ELECTIVE		2	
		TOTAL	24	

SUMMER WORK 12 WEEKS

C 207	SUMMER WORK	CASE STUDIES IN CITY DESIGN	2	
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2ND YEAR

SEMESTER I

18 WEEKS + 2 WEEK BREAK

SUBJECT CODE		SUBJECT	CREDITS	PRE-REQUISITE
C 301	STUDIO III	URBAN RENEWAL	14	C 201
C 302	THEORY	URBAN LANDSCAPE	3	
C 303	THEORY	DEVELOPMENT MANAGEMENT & FINANCE	3	
C 304	THEORY	PROJECT PLANNING AND APPRAISAL	2	
E 305	ELECTIVE		2	
		TOTAL	24	

SEMESTER II

18 WEEKS + 2 WEEK BREAK

SUBJECT CODE		SUBJECT	CREDITS	PRE-REQUISITE
C 401	STUDIO IV	THESIS	18	ALL PREVIOUS COURSES
SM 402	SEMINAR	RESEARCH METHODOLOGY	2	
		TOTAL	20	

SUMMER TRAINING 12 WEEKS

C 403	SUMMER WORK	INTERNSHIP & RESEARCH PAPER	6	
TOTAL			100	

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.

MASTER OF ARCHITECTURE IN CITY DESIGN

COURSE STRUCTURE AND CREDITS

SEMESTER 1

Total Credits: 24

Studio : C 101
Subject : STUDIO I - Urban Studies & Design
Credits : 10

Background:

This studio emphasizes on understanding urbanization and urbanism. City – its morphology, determinants, relationships, activities, history and methods of analysis. It also attempts to combine 'design' with the complimentary 'developmental' process. The method adopted is of unraveling each layer and understanding it independently and in relation with others.

Emphasis:

- Skill formation & Community Planning exercises.
- Identification of needs of a community through socio-economic and physical survey- including updating a given data/ base map, etc.
- Site planning, Housing cluster and residential sector studies - layout, density, utility net-work and community facilities locations& cost benefit thereof.
- Land use interaction studies of a small urban area and its environment.

Requirements

(From students):

Study, analysis and representation (collaborative work)

1. City structure, Land use plan,
2. Road network and hierarchy,
3. Major Open Spaces,
4. Neighborhoods, Types of Streets,
5. Typologies, Urban space, and human activity patterns,
6. Water supply and drainage systems, elements of landscape,
7. Urban aesthetics, Landmarks, Activity generators/nodes.

Design

1. Urban Structure and intervention
2. Elements, Urban Space, and the built form
3. Presentation is expected on analysis, guidelines and a demonstration of concerns.

Evaluation:

Intermediate Reviews	50% by studio faculty.
Final Jury	50%
	(External examiner 25%)
	(Internal studio faculty 25%)

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.

MASTER OF ARCHITECTURE IN CITY DESIGN

COURSE STRUCTURE AND CREDITS

SEMESTER 1	Total Credits: 24
Theory :	C 102
Subject:	History and Evolution of City Planning
Credits:	3

The course aims at introducing simultaneously to the students the concepts of 'urbanization' and 'urbanism' across space and time. The process, determinants/generations and resulting patterns would be discussed. In a limited way, the effort is to show how cities are shaped, at once by the dynamics of a number of forces – economic, social and political – and briefly how the theory and practice of urban planning and design has endeavored to synchronize itself with the ever-changing urban reality.

Origin and evolution of planning; Impacts of Industrial Revolution on town and regional planning; Contemporary developments in planning; formation of metropolitan areas; socio-economic impacts of growth of population; rural-urban migration.

Contributions of Ebenezer Howard, Patrick Geddes, Tony Garnier, Lewis Mumford, Le-Corbusier and others in planning.

The course will be conducted using a mix of faculty lectures, reading and student presentations. A high level of classroom participation is expected, which is reflected in the method of evaluation.

References

- Angotti, Thomas, (1993); *Metropolis 2000 – Planning Poverty and Politics*; Routledge, London
- Bhooshan B. and Mishra R., (1979); *Habitat Asia : Issues and Responses, Vol. I on India*; Concept Publishing Co. , New Delhi
- Bachiller, Augustin Rodrigues, (1988); *Town Planning Education*, Avebury Aldershot
- Castells M., (1983); *Squatters and Politics in Latin America : A Comparative Analysis of Urban Social Movements in Chile, Peru and Mexico*, in Safa H. (ed.), *Towards Political Economy of Urbanisation, Third World Countries*; Oxford University Press, New Delhi
- Chauhan U., (1991); *The World Bank and Indian Urban Development*, Unpublished Dissertation, School of Planning, Ahmedabad
- Davidoff P., (1973); *Advocacy Planning and Pluralism in Planning*, in Faludi A. (ed.), *A Reader in Planning Theory*; Pergamon Press, Oxford
- Desai P. (1991); *The Non-Governmental Process : A Study of Two Non-Governmental Organisations*; Unpublished Dissertation, School of Planning, Ahmedabad
- Dossal M., (1991); *Imperial Designs and Indian Realities : The Planning of Bombay City – 1845-1875*; Oxford University Press
- Eversley D., (1973); *The Planner in Society*, Faber and Faber
- Foley, D.L., (1973); *British Town Planning : One Ideology or Three*, in Faludi A. (ed.), *A Reader in Planning Theory*, Pergamon Press
- Gans H., (1968); *People and Plans*, Basic Books
- Ganguly, R., (1986), *Role of Secondary Cities and the Strategy for their Integrated Planning*, *Nagarlok* 18:4
- Ghosh, S. (1991), *evolution of Jodhpur : A Study in Urban History*, *Literature Review*, School of Planning, Ahmedabad
- Gillion, K., (1968), *Ahmedabad – A Study in Indian Urban History*, University of California
- Greed, C. (1993), *Introducing Town Planning*, Longman
- Grewal, R. (1991), *Urban Morphology Under Colonial Rule*, in Banga I. (ed.) *The City in Indian History*, Manohar Publishers
- Mehta M., (1985), *Urban Informal Sector – Concepts, Indian Evidence and Policy Implications*, in *Economic and Political Weekly*, May, 27
- Mehta, M. and Mehta, D. (1989), *Priorities in Urban Planning and National Commission on Urbanization*, in *EPW*, May 27

- Safe, H. (ed.) (1983), Towards Political Economy of Urbanization in Third World Countries, Oxford University Press
- Stewart, M. (1974), The City
- Walker, B., (1981), Welfare Economics and Urban Problems, Hutchison, London

Requirements

(from students):

Readings, Presentations and Paper.

Evaluation :

Intermediate Reviews 50% (Internal)

Final Assignment Submission 50% (External)

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.

MASTER OF ARCHITECTURE IN CITY DESIGN

COURSE STRUCTURE AND CREDITS

SEMESTER 1

Total Credits: 24

Theory : C 103

Subject : Land use and Transportation Planning

Credits : 3

Contents:

Importance of Land use planning, consideration, classification, land use structure, inter relationship of Land use density and Limitations of Land use planning.

1. Theories Concept and approach of Land use Planning
2. Land use Policy
3. Theoretical – descriptive concept of spatial organization and distribution of Land use planning.
4. Elements of Land use Planning
5. Land uses, physical structure and relationship between parts of a city.
6. The interim and comprehensive plans: Structure Plan, Master Plan, Zonal Development Plan - their purpose and contents.
7. Current Planning thoughts.

TRANSPORTATION PLANNING

1. Transportation systems and its characteristics;
2. Land use-transportation inter-relationships; transportation planning process;
3. Planning of public transport systems; Intermediate public transport modes;
4. Planning considerations for goods transportation and Recent innovations in technologies and its probable impacts on future urban forms.
5. Traffic flow characteristics; Traffic analyses and design considerations; design of intersections; traffic signals and street lighting; local area traffic management.
6. Environmental impacts of traffic; energy issues in transportation; transportation safety.
7. Government transport policies and evaluation of transportation proposals.

References

- Begde, P.V., (1978); Ancient and Medieval Town Planning in India, Sagar Publications, New Delhi
- Best, R. H., Land Use and Living Space
- Buchanan, (1964), Traffic in Towns, Penguin
- Chapling, F.S. and Kaiser E.J., (1979); Urban Land Use Planning, University of Illinois, Urbana Champagne
- Dimitriou, T. H., (1990); (ed.) Transportation Planning for Third World Countries, Routledge
- Director of Town Planning, Andhra Pradesh (1972); Building Regulations for Happy and Healthy Living, T.P. Draft, A.P., Hyderabad
- ESCAP, (1975), Guidelines for preparing sub-national population projections, UN, Bangkok
- Faludi, A. (1973); A Reader in Planning Theory, Pergamon Press, Oxford
- Goodal, B., (1972); The Economics of Urban Areas, Pergamon, Oxford
- Hutchinson, B.G., (1974); Principles of Urban Transport Systems Planning, McGraw-Hill
- Lynch, K., A Good City Form
- Leibrant, K., (1970), Transportation and Town Planning
- Stover Vergil Q. and Koepka F., (1988); Transportation and Land Development

Requirements

(from students):

Evaluation :	Periodic Internal Submissions	50%
	Theory Exams	50%

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.

MASTER OF ARCHITECTURE IN CITY DESIGN

COURSE STRUCTURE AND CREDITS

SEMESTER 1

Total Credits: 24

Theory: C 104

Subject: Housing, Community Planning & Policies

Credits: 3

Contents:

The course aims to develop an understanding on shift in perception of housing problem and changing attitudes towards solutions. It also touches upon the issues related to urban housing problem and develop an understanding on modes of housing supply, housing need assessment, housing need v/s demand. The course examines issue of affordability for housing, housing finance, legislation and how they affect settlement patterns. It also examines the relationship between housing densities and housing typologies.

1. Housing problems: Urbanization and Industrialization.
2. Slums and squatters settlements - problems and possibilities.
3. Residential layouts, housing densities, neighborhood unit, community facilities.
4. Social aspects: built environment and human behavior, Evaluation of user's satisfaction.
5. Finance for housing: priority in the national plans - role of public and private agencies, role of cooperatives and various institutions.
6. Cost reduction techniques in housing.
7. Housing norms and standards.
8. Estimating Future Housing Needs
9. Urban Housing Strategy Formulation & Strategies for Housing the Urban Poor
10. Housing Policy and Perspective at National Level

References

- National Building Organization, Govt. of India, handbook of Housing Statistics, NBO, New Delhi, 1981
- De, Prasanta, 1988, Review of Literature on Housing Programme for the Urban Poor in India, CEPT, Ahmedabad
- Rosser, C., 1971, Housing for the lowest income group : the Calcutta experience, Ekistics, No. 183
- Ramchandran, P. N., Housing Situation in Greater Bombay, CIDCO report No. 2, Bombay
- Government of India, National Housing Policy, GOI, New Delhi
- Burton G.L., and Cherry G.E., Social Research Techniques for Planners, George Allen and Unwin, London
- Government of India, Housing Condition and Situation, handbook of Housing Statistics, 1980
- Vyas, D., Major Issues and Imperatives – Towards a framework for Local Housing Strategies, Unpublished Disseratation, School of Planning, CEPT, Ahmedabad.
- Mehta, M. and Mehta, D., A Model Framework for Strategy Formulation in the Housing Sector – A Report on Housing Strategies for the Eighth Plan : A Perspective of Gujarat State
- Methods of Estimating Housing Needs, UN Publication No. 67 XVII 15
- De, Prasanta, Reader on Housing, CEPT, Ahmedabad
- Rapoport, A., Culture, Site Layout and Housing
- Das, S. K., Urban Coherence and Housing Strategies Design Ideas in Practice in India

Requirements

(from students):

Evaluation : Short Assignment
Periodic Internal Submissions 50%
Theory Exams 50%

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.

MASTER OF ARCHITECTURE IN CITY DESIGN

COURSE STRUCTURE AND CREDITS

SEMESTER 1

Total Credits: 24

Elective: C 105

Subject: Space Culture and Urban Design (Seminar)

Credits: 3

Industrialization in 19th Century brought monumental changes to the City form and Human life. One of the main elements of this phenomenon was population explosion resulting in large-scale migration of people from rural areas to urban centers.

The negative effects of industrialization were the fissures caused in the fabric of cities. The Architecture of the city changed and the quality of life was disturbed. Even the most wealthy and progressive cities could not offer even elementary necessities of life; they remained as man-heaps, machine-warrens and not organs of human association. This adverse impact continues to haunt urban life even today. The notion of space, the very fundamental element of locating human life is subjected to change and new definitions. There is a need to understand the new structure and answer the various questions in designing the built environment to contain the very purpose of human life.

The objective of this seminar course is to involve students into an investigative process to read and analyze urban areas and examine, it for its human angles. The course will be conducted as series of discussions supported by case studies.

Requirements

(from students): Class seminars and term paper or a short film.

Evaluation : Intermediate Reviews 50% (Internal)
Final Assignment Submission 50% (External)

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.

MASTER OF ARCHITECTURE IN CITY DESIGN

COURSE STRUCTURE AND CREDITS

SEMESTER 1

Total Credits: 24

Elective: E 106
Subject: Remote Sensing and Geographic Information System
Credits: 2

Objective

The course will introduce overview of Remote Sensing; Introduction to Aerial Photography; Fundamental of Photo Interpretation; Sensors and various sensors platforms and basics of geographical information system. Students will have an opportunity to carry out practical applications such as identification of objects from the satellite image and establishment of association and relation of non-spatial data to Remote sensing data through hands on experience. Also hand-on practical experience to understand the use of GIS software. The main objective of this course is to create an awareness and interest among the students in recent remote sensing techniques and working knowledge in application of GIS.

The lecture sessions are designed to teach the minimum required but essential topics. The students have to undergo practical hands-on experience of learning and application of the technology.

Requirements

(from students): Assignment, Viva, Practical and Written test.

Evaluation :
Periodic Internal Submissions 50%
Theory Exams 50%

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.

MASTER OF ARCHITECTURE IN CITY DESIGN

COURSE STRUCTURE AND CREDITS

SEMESTER 2

Total Credits: 26

Studio: C 201
Subject : STUDIO II - New Urban Extensions
Credits : 12

Background:

Indian cities are experiencing a substantial growth rate for the last two decades. The increasing population, which the city has to accommodate, has led to more pressure on already built areas and the extension of development on its periphery. Such peripheral extensions are usually executed in a "piece meal" manner by concerned authorities, often based on development plan without any Urban Design inputs. This has resulted in un-planned development, poor quality of life for occupants and environmental stress in the surrounding areas. The process of urban extension need to be comprehended planned and designed to ensure better living conditions.

Objectives of the Studio

1. To understand the process of Urban Extensions.
2. To develop and draw references from the existing built morphology/typology for the new extensions in today's context.
3. To understand and evaluate the potential and the environmental condition of the site with respect to new development.
4. To carry out primary and secondary information collection in the form of surveys, documentation, mapping, site analysis etc.
5. To develop a broad structure plan for the site to accommodate development.
6. To develop a complete design proposal for the area including principles of site planning, natural features and environment, density pattern and lessons from tradition.

Project: Largely virgin land with prominent natural features, contiguous to the present development.

Inputs: Lectures on

Site planning
Landscape
Real Estate
Traffic

Requirements

(from students): Study and analysis

Regional understanding, City Structure, road network, hierarchy, Urban Development trends and issues, Defining urban extension and urban linkages to the site, Site analysis - topography, natural elements, existing development.

Design

Structure Plan showing land divisions, road network, elements, Response to topography and environmental issues, Demonstration of built form, streetscape, urban space, Sites and services, Phases of development and economic feasibility,

Drawings at all levels with models and a report in A-3 format

Evaluation:

Intermediate Reviews	50% By studio faculty.
Final Jury	50%
	(External examiner 25%)
	(Internal studio faculty 25%)

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.

MASTER OF ARCHITECTURE IN CITY DESIGN

COURSE STRUCTURE AND CREDITS

SEMESTER 2

Total Credits: 26

Theory : C 202
Subject : Planning Legislation & Professional Practice
Credits : 3

This course would discuss the origins/conception of planning as an activity in India - the agenda/preamble - Institutional/ Organizational framework - Tools and Techniques of Planning as controlling mechanisms. Various stages of planning are discussed briefly beginning from Master Plan, Development Plan, Town Planning Schemes and Area Planning

Contents:

Legislation

- The meaning, significance and objectives of planning legislation; constitutional basis and provisions relating to land, its development and use, concept of eminent domain, police power and taxation powers as basis of legislation.
- Evolution of planning legislation in India. An overview of legal tools connected with urban planning & development and Land management, Town and Country Planning, Improvement Trust and Development Authorities etc. - objectives, contents and procedures for preparation and implementation of Regional plans, development plans, Town Planning Schemes, Area Plans etc.
- Land Acquisition Act of India, its provision and limitation. Urban Land (Ceiling and Regulation) Act - objectives, contents and planning implications.
- Legislation on Conservation of natural resources including Mining and Forestry Acts, Conservation and Management of Ancient Monuments and Archaeological sites and ruins.
- Significance of Land Development Control - objectives and legal tools, critical evaluation of zoning, sub-division regulations, building regulations and bye laws.
- Urban Arts Commission Act, Transportation, Landscape, Housing and slum clearance legislation.
- National Environmental Policy Act.

Professional Practice

- Aims and objectives of professional institute, sister bodies, professional role and responsibility of planning consultants, professional ethics, code of conduct and scale of professional charges. Formulation of project proposal and outlines; consultancy agreements and contracts.
- Role in interdisciplinary groups; Appreciation of the decision making processes, and the process in relation to varied consultancy assignments of planning.

References

- Land Acquisition Manual
- Gujarat Town Planning and Urban Development Act, 1976
- BPMC Act, 1949 by Zindal
- Corporation Classes
- Housing Policy, Government of India
- Urban Land Ceiling Act, 1976
- Seminar on F.S.I., (1991) at CEPT, Ahmedabad
- Indian Constitutional Law by M.P. Jain
- Economics of Land Use by Lewis Keeble
- Densities in Housing, Tropical Countries, HMSO Publication, 1960
- Gujarat Co-Operative Housing Society Act
- Chawls in Ahmedabad (ASAG)

- 73rd and 74th Constitutional Amendment Acts
- Cities of Vision (Allied Publication)

Requirements

(from students):

Evaluation :	Term Paper	
	Periodic Internal Submissions	50%
	Theory Exams	50%

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.

MASTER OF ARCHITECTURE IN CITY DESIGN

COURSE STRUCTURE AND CREDITS

SEMESTER 2	Total Credits: 26
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Theory: C 203
Subject: Urban Infrastructure
Credits: 3

This course aims to provide a basic understanding of various issues and approaches to planning, designing, and maintenance of urban infrastructure. The course delivery shall be participatory in nature, various case studies and best practices shall be discussed during the course.

Contents:

1. General Introduction to Urban Infrastructure and Importance of Infrastructure in Planning process.
 2. Physical Infrastructure:
 - Urban Services – W. Supply, Sewerage, storm, Solid Waste Management, etc.
 - Transportation
 - Amenities / Facilities – Electricity, fire safety, communication, etc.
 3. Social Infrastructure
 - Health, Education, socio-cultural, etc.
- Approach towards building infrastructure
- Role of Public and Private Sector
 - Public-Private Partnership
 - Infrastructure Development Model
4. Infrastructure Management & Finance
 5. Integrated Infrastructure Planning for Innovative approach – Case Studies

References

- CPHEEO, Manual of Water Supply and Treatment, 1997, Ministry of H&UD
- CPHEEO, Manual of Sewage and Sewage Treatment, 1997
- Mohan, Rakesh, India Infrastructure Report 3iii net, 1997-2007
- McGhee, T.J., Water Supply and Sewage, McGraw Hill
- Metcalf and Eddy, Waste Water Engineering
- Haan, Coad and Lardipois, Municipal Solid Waste Management – Guidelines for Municipal Managers, 1998
- Garg, S.K., Water Supply Engineering (Vol. I) and Waste Water Supply (Vol. II)
- Gharpure, V., Textbook of Sanitary Engineering
- Expert Group Report to Hon'ble Supreme Court on Solid Waste Management Status in India, March, 1999
- Wegelin, E.A., New Approaches in Urban Service Delivery – A Comparison of Emerging Experiences in selected Asian Countries, 1990
- Imboff, K., Handbook of Urban Drainage and Waste Water Disposal

Requirements

(From students): Assignment and Written test.
Evaluation: Periodic Internal Submissions 50%
Theory Exams 50%

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.

MASTER OF ARCHITECTURE IN CITY DESIGN

COURSE STRUCTURE AND CREDITS

SEMESTER 2

Total Credits: 26

Theory : C 204
Subject : Urban Conservation (Seminar)
Credits : 2

- Urban Conservation, historic enclaves and their values, present condition and context - conservation planning procedures - evaluation criteria.
- Types of urban conservation - site visits, listing, analysis, zoning - urban conservation guidelines - charters and legislations.
- Conservation - means, mechanisms, agencies and financing.

Objective

To understand the relationship of Planning with conservation issues and to expose the students to the need for integrated development of historic cities at the planning level.

Content

- Conservation Concepts - History, Principles and Methods
- Adaptation and introduction of change in old areas
- Conservation scenario in India - International, National and Local Level
- International Charter pertaining to area conservation and Historic Cities (ICOMOS, ICOM, UNESCO, etc.)
- Legislation and Acts pertaining to Area Conservation
- Integrated Conservation Concepts: Components of Conservation

Reference

- Burnham, Bonnie – The Protection of Cultural Property – Handbook of National Legislation, the International Council of Museums, 1974.
- Bernard, Fielden, 'Between two Earthquakes' ICCROM
- Davis L. Uzzel, Heritage interpretation, the Natural and Built Environment; Belharm Press, 1989.
- Allan Dobby, Conservation and Planning, London
- ICOMOS – UK Charters, Venice, Buva, Florence.
- ICOMOS – UK draft – August 95, Guidelines for recording of Monuments, groups of Buildings and Cultural sites.

Requirements

(from students):

Evaluation : Short assignment.
Periodic Internal Submissions 50%
Theory Exams 50%

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.

MASTER OF ARCHITECTURE IN CITY DESIGN

COURSE STRUCTURE AND CREDITS

SEMESTER 2	Total Credits: 26
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Theory : C 205

Subject : Environment & City Development

Credits : 2

Contents:

1. Understanding our Environment
 - Ecosystems
 - Bio-diversity
 - Natural Resources
 - Pollution
2. Human Populations
 - Population growth rates, doubling time
 - Environment and human health
 - Stable population sizes
 - Social Issues and Environment
3. Environmental Conservations: Forest Resource, Grass Lands, Parks/Nature preserves.
 - Forest resource conservation
 - Ecosystem Preservation
 - Wildlife parks and Preserves
 - Water Shed Management
4. Waste Management in an Urban Context
 - Concept of Waste
 - Waste Disposal Methods
 - Solid Waste, Liquid Waste, Hazardous Waste.
 - Managing Waste more effectively
5. Environmental Policy and sustainability
 - Environmental Policy/ laws/ legislations
 - Role of Individuals/ communities
 - Towards a sustainable future

References

- Agarwal, K. C., Environmental Biology, Agro Botanical Publishers, New Delhi
- CSE (1995), South Asian Regional Workshop on Science and Climate Change, CSE, New Delhi
- WCED, 1987, Our Common Future, OUP, Delhi
- Birnie, P.W., and Boyle, A.E., 1992, International Law and the Environment, OUP, Delhi
- Simmonds, J.O., Earth Scape, A Manual of Environmental Planning, McGraw-Hill, New Delhi
- Ramchandran, R., 1991, Urbanization and Urban SDsystems in India, OUP, Delhi
- Caldwell, L. K., 1990, International Environmental Policy, Duke University Press, Affiliated EW Press Pvt. Ltd., New Delhi
- Benarde, M.A., 1989, Our Precious Habitat, 15 Years Later, John Wiley and Sons, New York
- De Klemm, C. and Shine C., Biological Diversity Conservation and the Law – Legal Mechanisms for Conserving Species and Ecosystems, IUCN, E'tal Policy and Law Paper 29, IUCN, Gland, Switzerland
- Crone, H.D., 1986, Chemicals and Society – A Guide to New Chemical Age, OUP, NY/Cambridge
- IGIDR 97 : India Development Report, OUP

**Requirements
(from students):**
Evaluation :

Short assignment.
Periodic Internal Submissions 50%
Theory Exams 50%

Elective: E 206
Subject: Elective
Credits: 2

Evaluation: Periodic Internal Submissions 50%
Theory Exams 50%

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.

MASTER OF ARCHITECTURE IN CITY DESIGN

COURSE STRUCTURE AND CREDITS

SEMESTER 2	Total Credits: 26
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SUMMER WORK:	12 Weeks (April-May-June)
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Summer Work:

Subject: Case Studies in City Design

Credits: 6

Duration: 12 Weeks (April-May-June)

This exercise aims at understanding the various interpretations of 'Urban Design' as employed in different circumstances or by authorities/designers.

Students are required to identify an implemented project which is illustrative of Urban Design. It is expected that they clearly define what 'Urban Design' is in their identified case and need to validate their choice. The students are required to present the case documented and then their analysis & critical appraisal of the design from conception to realization.

Students are expected to evolve their own analytical criteria under their respective faculty guidance. At the least they should bring out clearly the context/opportunity, the design strategy, design features, implementing strategy, tools/mechanisms, process/implementation, participants/state-holders, actual realization.

The emphasis is quite clearly on analysis and critical appraisal. The students should ensure that sufficient data is available for the selected case. It is hoped that this would build up a base to discuss Urban Design Theory in Sem III.

Requirements from Students:

Submission of proposal approved by their guide
(A-4 vertical format)

Review – Presentation of the complete documentation and 'Urban Design' defined in their case.
Critical Appraisal of the case study.

Final Jury & Submission of Document
(Submission of the document in A-3 vertical format and one copy in CD)

Evaluation : By Course Faculty

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.

MASTER OF ARCHITECTURE IN CITY DESIGN

COURSE STRUCTURE AND CREDITS

SEMESTER 3 (July-November)

Total Credits: 24

Studio: C 301
Subject: STUDIO III - Urban Renewal
Credits: 14

Background:

Urban Development is obsessed with peripheral extension.

The studio examines that in the process of growth and change a number of areas, buildings and open spaces become obsolete. The city does offer fantastic opportunities for renewal/ restructuring of such areas. This Studio focuses on Urban Renewal.

In the process of transformation, the present urban 'development' is characterless and undifferentiated. We accuse that the emerging form is a resultant of very narrow concerns. Contemporary development of cities across the country looks the same. There is no architectural idea of the city. One cannot 'dwell' in the right sense of the word. This studio examines the role for Urban Design in this scenario.

Does it make sense to speak of 'Context', 'Sense of Place' and 'Character' in a fragmented city? How do we address the present tools/mechanisms of development, the increasing contrast: global-local etc? What are our concepts now of sustainability, neighborhood, public private, control and freedom. Can we incorporate the multiplicity?

Can we guide preferred change?

Requirements

(from students): Documentation of various operating systems – changing determinants,
Critical appraisal,
Strategy for intervention – response to the changing processes,
Evolving the design brief,
Setting the ground – a contextual system position,
Structuring, financial and implementation strategies policy formation and control mechanism,
Demonstration project.

Evaluation: Intermediate Reviews 50%
Final jury 50%
(External examiner 25%)
(Internal faculty 25%)

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.
MASTER OF ARCHITECTURE IN CITY DESIGN

COURSE STRUCTURE AND CREDITS

SEMESTER 3 (July-November)	Total Credits: 24
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Theory: C 302
Subject: Urban Landscape
Credits: 3
Contents:

Requirements (from students): Presentations and Term Paper

Evaluation: Periodic Internal Submissions 50%
Final Submission 50%

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.

MASTER OF ARCHITECTURE IN CITY DESIGN

COURSE STRUCTURE AND CREDITS

SEMESTER 3 (July-November)

Total Credits: 24

Theory: C 303
Subject: Development Management & Finance
Credits: 3

This course attempts to provide an exposure to issues of urban systems management: beginning with the institutional context of the various bodies/organizations responsible for the provision and maintenance of urban services, their roles and constraints; to the management of physical infrastructure itself, including systems like water supply sanitation, electricity, roads, etc. The thrust of the course would be to assess the impact of rapid development on these systems and to understand the implications in urban design. This course is conducted as a seminar with inputs from various professionals.

Contents:

1. Introduction to Concepts, Planning and Management of Urban Government
2. Issues in Urban Management/Urban Governance
3. Evolution of ULBs & various institutions, organizational structure, functions, best practices
4. Administrative Structure and System and reforms.
5. Overview of Municipal Legislation
6. Metropolitan Government System in India
7. Financial Planning and Techniques
8. Accounting and Budgeting Procedures and Techniques
9. Municipal Tax Structure and Resource Mobilization Options

References:

- Musgrave and Musgrave, (1976), Public Finance in Theory and Practice, McGraw Hill
- Tripathi, R.M., (1967), Local Finance in a Developing Economy, Cambridge Printing Press, New Delhi
- Shafi S.S., ((1981), Planning the Indian Metropolis: Some Reconsideration in Urban Problems and Policy Perspectives, Abhinav Publications, New Delhi
- Parthasarathi, R. and Others (1980), Urban Development and Urban Authorities, in Municipal and Urban India by Satta A.(ed.), IIPA, New Delhi
- Bhattacharya Mohit (1976), Management for Urban Government in India, Uppal Book Store, New Delhi
- India Planning Commission (1983), Task Force on Housing and urban Development, part I: Planning and Urban Development, Part II : Management of Urban Development
- Jha, G. and Mishra, S.N., (1984), Development and Functioning of Urban Local Self Government and Rural Local Self Government in India, in Nagarlok
- Buxton, R.J., (1970), Local Government, Penguin Books
- Balachandran, M.K., (1980), Legal Framework of Municipal Management : Some Aspects, in Municipal and Urban India by Datta, Abhijit (ed.), IIPA
- Bhattacharya, Mohit, (1969), State Directorates of Municipal Administration, IIPA, New Delhi
- IIPA (1977), Proposal for Model Legislation for Municipal Corporations, Centre for Urban Studies, IIPA, New Delhi
- Bhatt, Anil, (1980), City Management : A Study of Some Aspects of Municipal Administration in Ahmedabad and Baroda, IIMA
- Mishra, B.S., (1974), Municipal Taxation in Developing Economy
- Datta, Abhijit (1980), Municipal and Urban India, IIPA, New Delhi
- Bhatt, M. and Trivedi, M.S. (1969), Metropolitan Finance in a Developing Economy – A Case Study

Requirements

(from students): Presentations and Short assignment or viva-voce.

Evaluation : Periodic Internal Submissions 50%
Theory Exams 50%

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.

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COURSE STRUCTURE AND CREDITS

SEMESTER 3 (July-November)

Total Credits: 24

Theory: C 304

Subject: Project Planning and Appraisal

Credits: 2

Contents:

1. Introduction to Project Objectives and Components
2. Project Life Cycle
3. Stages in Project Development
4. Project Appraisal Techniques
5. Financial Analysis
6. Social Cost-Benefit Analysis
7. Project Management
8. Project Monitoring

References

- Chandra, P., Project Planning, Analysis and Review
- Choudhary, S., Project Management
- Ministry of Programme Implementation, Government of India, A Manual of Project Implementation, New Delhi
- Joy, P.K., Handbook of Construction Management, Macmillan
- Joy, P.K., Total Project Management
- Ahuja, H.N., Dozzi, S.P., Project Management Techniques
- UNIDO, Guidelines for Project Evaluation, UN
- Planning Commission, Guidelines for the Preparation of Feasibility Reports, Controller Publications, New Delhi

Requirements

(from students):

Evaluation :	Periodic Internal Submissions	50%
	Theory Exams	50%

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.
MASTER OF ARCHITECTURE IN CITY DESIGN

COURSE STRUCTURE AND CREDITS

SEMESTER 3 (July-November)

Total Credits: 24

Elective: E 306
Subject: Elective
Credits: 2
Evaluation : Periodic Internal Submissions 50%
Theory Exams 50%

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.

MASTER OF ARCHITECTURE IN CITY DESIGN

COURSE STRUCTURE AND CREDITS

SEMESTER 4

Total Credits: 26

Studio: C-401
Subject: Thesis
Credits: 18

Background:

Based on the theoretical premise explored in the previous semester, the students are expected to translate/explore the findings into design. Urban Design is to be approached as a matter of public policy and not as a large scale architectural project. Students, through their design, must bring out the control mechanisms, room for variations and freedom within a clearly identified set of values and objectives.

Objectives:

- To explore a theoretical premise and its potential through a design project.
- To establish that urban design is to be approached as a matter of public policy and not as a large scale architectural project.
- To enable students to conceptualize, investigate and synthesize environmental objectives, design methods, and contextual issues at urban scale.

Project: Independent projects under individual guides.

Requirements

(from students): Study and analysis

Documentation, Study and analysis,
Base Drawings, Regional level, City Level, Area Level and Unit Level.
Surveys, Photographic documentation etc.

Design

Master plan/ Site plan/ Urban linkages and Urban structure
Land use/ Built Vs Open/ Density/ Street network/ Sites and services
Urban Form/ Urban Space/ Unit typology/ Scale/ Character/
Aesthetics
Socio-economic analysis,
Financial strategies, implementation techniques, control mechanisms, phasing diagrams.

Demonstration

Part Demonstration of the project
Architectural resolution/ Building guidelines/ Street character
Pedestrian space/ Road Geometry/ Signage/ Landscape/
Lighting

Models at appropriate scales.
Submission of the final report in A-3 format.

Evaluation :	Guide	25%
	Internal Juror	30%
	External Juror	30%
	Thesis Co-ordinator	15%

Resident requirement of students during the entire period of thesis is mandatory.

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.
MASTER OF ARCHITECTURE IN CITY DESIGN

COURSE STRUCTURE AND CREDITS

SEMESTER 4	Total Credits: 26
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Theory: C 402
Subject: Professional Practice
Credits: 2

Requirements (from students): Presentations and Short assignment or viva-voce.
Evaluation : Periodic Internal Submissions 50%
Theory Exams 50%

Theory: C 402
Subject: Internship and Research Paper
Credits: 6

Requirements (from students): Presentations of Report
Evaluation : By course faculty.

LIST OF ELECTIVES

1. **Advanced Transportation Planning**

Concepts Techniques
Regional Road Network Planning
Public Transportation Planning

2. **Environmental Impact Assessment**

Introduction to EIA
Impact Identification Techniques
Impact Evaluation Techniques
Predicting Impact on the Physical Environment
Predicting Impact on Biota

3. **Urban Disaster Management**

Introduction to the Concept of Disaster Management and Mitigation
Trends in Urban Development and Challenges before Urban Administrators
Natural Disasters
Hazard and Vulnerability Assessment
Technological hazards at City Level
Safety Management System
Fire Safety at City Level
Emergency Planning, Preparedness and Response at City Level
Community Based Disaster Management Practices
Education and Training on Mitigation and Emergency Planning

4. **Housing Market and Finance**

Introduction to the Concepts of Housing as an Economic Good, Housing Market Segmentation, Housing Finance in the Housing Market
Micro-economics of Housing Market – (Housing Demand and Supply Determinants, Housing Demand Analysis, Affordability and Willingness to Pay)
Housing Consumption
Housing Supply Systems
Informal Housing Market
Indian Financial System – Major Institution – their role, functions, policies, etc.
Housing Finance System in India
Housing in National Economy and Housing Policies

5. **Advanced GIS**

6. **Urban Economy/ Local Economic Development Planning**

7. **Participatory Planning and Community Development**

8. **Research Methodology**

Note:

1. Electives will be offered in 2nd and 3rd Semester on the basis of availability of expertise in respective field.
2. List of elective can be modified as per the availability of expertise and need of the subject.