

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**

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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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%)

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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%)

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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%

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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%

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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%

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COURSE STRUCTURE AND CREDITS

SEMESTER 2

Total Credits: 26

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%

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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
