SYLLABUS

MASTER OF ARCHITECTURE
M.Arch. (CITY DESIGN)

SUGGESTED COURSE STRUCTURE & CURRICULUM

2007-09

FEBRUARY 10, 2006
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<th>PRE-REQUISITE</th>
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<tr>
<td>C 101</td>
<td>STUDIO I URBAN STUDIES &amp; DESIGN</td>
<td>10</td>
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<td>C 102</td>
<td>THEORY HISTORY &amp; EVOLUTION OF CITY PLANNING</td>
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<td>E 106</td>
<td>THEORY REMOTE SENSING AND GIS</td>
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<td>TOTAL</td>
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VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.
MASTER OF ARCHITECTURE IN CITY DESIGN

COURSE STRUCTURE AND CREDITS

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>Total Credits: 24</th>
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**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 network 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:**

<table>
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<tr>
<th>Reviews</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Intermediate Review</td>
<td>50% by studio faculty.</td>
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<tr>
<td>Final Jury</td>
<td>50%</td>
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<tr>
<td>(External examiner 25%)</td>
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<td>(Internal studio faculty 25%)</td>
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<tr>
<td>Theory :</td>
<td>C 102</td>
</tr>
<tr>
<td>Subject:</td>
<td>History and Evolution of City Planning</td>
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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
- 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
- Davidoff P., (1973); Advocacy Planning and Pluralism in Planning, in Faludi A. (ed.), A Reader in Planning Theory; Pergamon Press, Oxford
- Dossai 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
- Gillion, K., (1968), Ahmedabad – A Study in Indian Urban History, University of California
• Stewart, M. (1974), The City

Requirements (from students): Readings, Presentations and Paper.
Evaluation: Intermediate Reviews 50% (Internal)
                        Final Assignment Submission 50% (External)
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<td>Theory :</td>
<td>C 103</td>
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<tr>
<td>Subject :</td>
<td>Land use and Transportation Planning</td>
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<td>Credits :</td>
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<tr>
<td>Contents:</td>
<td>Importance of Land use planning, consideration, classification, land use structure, inter relationship of Land use density and Limitations of Land use planning.</td>
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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.

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
- Dimitriou, T. H., (1990); (ed.) Transportation Planning for Third World Countries, Roulledge
- 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
- 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%
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<td>Theory:</td>
<td>C 104</td>
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<tr>
<td>Subject:</td>
<td>Housing, Community Planning &amp; Policies</td>
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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.
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.
9. Urban Housing Strategy Formulation & Strategies for Housing the Urban Poor.

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
- Government of India, Housing Condition and Situation, handbook of Housing Statistics, 1980
- 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): Short Assignment
Evaluation:
- Periodic Internal Submissions 50%
- Theory Exams 50%
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<td>C 105</td>
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<td>Subject:</td>
<td>Space Culture and Urban Design (Seminar)</td>
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<td>Credits:</td>
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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)
### Objective
The course will introduce an 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%