

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.

TEACHING AND EXAMINATION SCHEME

AT B. ARCH - V SEMESTER IX & Xth

DEPARTMENT OF ARCHITECTURE SARVAJANIK COLLEGE

OF ENGINEERING AND TECHNOLOGY

SURAT-395 001

JUNE 1999

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.

B.ARCH. - V

SEMESTER - IX

From August 1999

COURSE	COURSE : No.	TEACHING SCHEME	EXAMINATION SCHEME								GRAND TOTAL	
			Theory Exam		Pract / Quiz / sketch exam			Total				
		L	T	P	Duration ; Hours	Marks	Tutorial ; Marks	End Sem. Marks	Cont. ; Eval. ; Marks	(8+9+ 10)	(7+11)	
1	2	3	4	0	6	7	8	9	10	11	12	
Studio- IX ; Architectural Design	AR-901			14	-----	—	—	300	200	j	500	500
ousnu;and cmmumtv -- iannina	AR-902	3	2 ^j	2	3	100	50	30	20	:	100	200
Land scape ■ i=aign	AR-903	2	1	2*	-----	3	100	50	—	—	50	150
Zlective - (V* AR-91".		3	2*	-----	3	100	50	—	—	50	:	150
Total Contact Hours / Week		08	06	16	300		150	330	220	:	700	1000
		30				Total marks				1000		

* Student have to opt one subject from *mtk* Elective Group IV as below.

* Elective IV (911 - Interior Design, 912-Architectural Conservation. 913 - Modern Building Systems)

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3. ARCH. - V SEMESTER - X
From January 2000

COURSE No.	TEACHING SCHEME	EXAMINATION										GRAND TOTAL		
		SCHEME					Theory Exam						Pract / Quiz / sketch exam.	
		Duration ; Marks :					Tutorial Marks							End . Cont. I Total i
		L	T	P	Hours	Marks	Sem. !	Eval.	(8+9+ j	(7+11) Marks •	Marks !			
1	2	3	4	5	6	7	8	9	10	11	12			
Studio- X : Architectural Design	AR-1001	-----	-----	25	-----	1	---	---	500	350	850	850		
Professional : Practice	AR-1002	3	2-	---	3	100	50	---	---	150	150	150		
Total contact hours/Week		3	2*	25			100	50	500	350	900	1000		
				30	Total Marks						1000	1000		

+ Not to be considered at Patting Heads and Evaluation is by the department

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**B.ARCH V
SEMESTER IX**

AR- 901 STUDIO-IX : ARCHITECTURAL DESIGN

TEACHING SCHEME: L T P EXAMINATION SCHEME:

0 0 14

**CONT.EVAL. ASSES. 200 MARKS
END SEM.ASSES. 300 MARKS**

STUDIO WORK:

1. Contextual/ Conceptual analysis. Formulation of project by case studies, studies of design issues and selection.
 2. Resolution of project to integrate the dimensions of functional character cultural values, climatic considerations. Structure and urban context.
- *I. Project Work: Institutional or urban development or housing project as per student's choice.*

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B.ARCH V SEMESTER IX

AR- 902 HOUSING AND COMMUNITY PLANNING

TEACHING SCHEME: L T P

3 2 2

EXAMINATION SCHEME:

Theory	100 Marks(3 hrs.)
Tutorial	50 Marks
Cont. Eval. Asses.	20 MARKS
End SemAsses.	30 MARKS

THEORY:

1. Introduction

Housing as a basic need and integrated part of urban rural and regional development, Housing problems in urban and rural sectors, Housing statistics on shortage etc.

2. Housing provision and policies

Quantitative and qualitative demands of housing, estimates of future, housing needs Government policies and programmes for housing provision.

3. Housing co-operative management and financing: Objectives and general principles of co-operatives, housing on self-help and non-profit basis, housing agencies and their functions, housing finances.

4. Housing surveys, standards and design:

Sources of data and information, methods and techniques of housing surveys, Housing standards for densities and community facilities, related acts and laws, Topography, Orientation, and extrovert housing. Techniques of land sub-division, road layout, housing land use, structural concepts, use of traditional and new building material and methods and low cost housing design and construction.

5. Community planning and design:

Role of public participation, organizations and groups, interlining old and new values, design of existing and new communities, redevelopment of slums and squatter settlement.

TUTORIALS/STUDIO WORK:

Assignments are formulated to cover the above theory.

REFERENCES:

1. JosepH De Chiara, Juius Panero & Martin Zelnik," Time Saver Standards For Housing and Residential Development", Mc Graw Hill International, (1995)
2. Fredrik Gibberd , " Town Design", Architectural Preserver.
3. Heggde D., "Housing in India" Himalya Pub. House, Bombay.

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B.ARCH V SEMESTER IX

AR- 903 LANDSCAPE DESIGN

TEACHING SCHEME:	L	T	P	EXAMINATION SCHEME:	
	2	2	0	Theory	100 Mark B (3 hr».)
				Tutorial	50 Marks

THEORY:

1. Man and Nature:

Understanding man and nature. Their interrelationship, interdependence and effect on human psychology. The ecological basis. The biosphere, the living landscape. The landscape character, its classification/categories and quality, ways to make it fit the given requirements of man without disturbing the ecological balance.

Natural forces, forms and features the earth landscape, landscape elements. Land as heritage, as a resources, as landscape feature water related site design, aquatecture a brief introduction. Planes in nature, as plantations, plant identification, the planned and planted landscape. Classification of climates, macro and microclimate: its effect on architectural design and 3ite design.

2. Site:

Selection criteria, study and analysis. The planning design process, commission research analysis, synthesis, construction and operation. Site development guidelines, excavation, grading, and slopes roads, parking site drainage, site furnishings and landscape planning.

3. Space site volumes,

qualities, forms definitions, spatial color, abstract expression, Elements of containment, Visual control, visual landscape, the view, the vista, the axis, the characteristics and visual resources management.

4. Circulation:

Motion, the qualities, the approach, pedestrian way, vehicular circulation and parking.

5. Structures

Composition, type qualities, structures in landscape.

6. Habitations

House versus nature, human needs and habit. Community the group, clusters, qualities, forms. The cityscape, urban activity centres. Family cluster, neighborhood community, city, Environment, philosophy, planning order.

TUTORIALS/STUDIO WORK:

Assignments are formulated to cover the above theory.

REFERENCES :

1. Charles W. Harris & Nicholas T Dines, " Time Saver Standards For Landscape Architecture" , Mc Graw Hill International, (1995)
2. Francisco Asensio Cerver, " Landscape Of Recreation II (Amusement Parks) , (1992)
3. Nelson Hammer , " Interior Landscape Design", Mc Graw Hill International, (1991)

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B.ARCH V SEMESTER IX

AR- 911 INTERIOR DESIGN

TEACHING SCHEME: L T P

EXAMINATION SCHEME:

3 2 0

Theory
Tutorial

100 Marks(3 hre.)
50 Marks

THEORY

1. Design problems:

To bring out the originality innovations and the best of imagination from the students,

2. Understanding the Need for design of interiors.

Effect of built spaces/interior spaces on human psyche. Historical background of interior design and international perspective. Interior space character, classification/categories and quality.

3. Elements of interior space.

The built environment, the living interiors, in today's context. Space, form, colour, abstract, spatial expression. The base plane, the overhead plane, the verticals, the intermediates. Visual aspects, visual control, illusions. Visual art appreciation: A brief look and major Art Movements that have affected design.

4. Interior Climate:

Orientation of Interior space with respect to outdoor climatic forces. Outdoor climate study, study of microclimate. Spatial layout for best comfort indoors with respect to natural climate. Air movement, natural illumination, and natural heating/ cooling. Artificial interior environment-artificial illumination, artificial climate, air conditioning etc.

5. Elements of Interior design:

Materials, a study of the latest available, preparations of a scrap books. Furniture/fittings, past present and future, an international perspective. Water in interior space. Plants in interior space, planter design, drainage, plant species, plants care. Sound modulation in interior spaces, Practical examples and exercise for all the above.

TUTORIALS/STUDIO WORK:

Assignments are formulated to cover the above theory.

REFERENCES:

1. Kasu Ahmed, - Interior Design", IQUARA Publication Pvt Ltd. Bombay, India (1995)
2. Joseph* De Chiara, Juius Panero & Martin Zelnik," Time Saver Standards For Interior Design and Space Planning", Mc Graw Hill International, (1995)
3. Stephen Calloway,^{5*} The Elements Of Style - An Encyclopedia of Domestic Architectural Details", Reed Consumer Books Ltd, London, (1994)

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B.ARCH V SEMESTER IX

AR- 912 ARCHITECTURAL CONSERVATION:

TEACHING SCHEME:	L	T	P	EXAMINATION SCHEME:	
	3	2	0	Theory	100 Markt>{3 hn>.)
				Tutorial	50 Marks

THEORY

1. Definitions and understanding: Conservation, preservation. Restoration, Rehabilitation, adaptation, Rebuilding and alike terms.
2. Development of the concept of conservation and preservation in the west after Second World War.
3. Development of the system into Archaeological survey of India (ASI) by mid 1950, after the end of the Second World War. National and international agencies involved in education, training and implementation inn the field of conservation.
4. Method of listing of monuments as per INTACH rules. Pioneer projects or Urban Conservation at Chanderi, Ujjain, Jaisalmer, Hampi, Indore, Junagarh etc.
5. Awareness factors about the subject, reasons of lack of awareness and ways and process to improve it.
6. Difference between monumental conservation of India as Showpieces for tourism and urban conservation in the west to preserve the Heritage.
7. Chemical treatment and structural treatment for the conservation. Integrated.

TUTORIALS/STUDIO WORK:

Assignments are formulated to cover the above theory.

REFERENCES:

1. Roy Worskett, " The Character of Towns : An Approach to Conservation", The Architectural Press, London (1969)
2. Wolfred Burns, " New Towns for Old: The Technique of Urban Renewal", Leonard Hill Ltd. London (1963)
3. Wilson* James G. " Urban Renewal : The Record and the-Controversy" M.I.T. Press , Boston (1966)
4. Proceedings Of a Conference organized by the Institution of Civil Engineers

London , " Repair and Renewal of Building" Thomas Telford Ltd. London (1983)

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B.ARCH V SEMESTER IX

AR- 913 MODERN BUILDING SYSTEMS

TEACHING SCHEME: L T P EXAMINATION SCHEME:

3 2 0 Theory 100 Marks(3 hxa.)
Tutorial SO Marks

THEORY:

1. Conceptual structural systems for high rise buildings such as verendeal trusses, shear wall etc.
2. Domes, shells, vaults, arches in masonry/ R.C.C. / timber.
3. Space frames, Geopdesic domes.
4. Modern construction system such as lift slab, slip slab, folded plates, tensile structure etc.
5. Principles of precast and prestressed structure.

TUTORIALS/STUDIO WORK:

Assignments are formulated to cover the above theory.

REFERENCES :

1. Pier Luigi Nervi," Advance Building Construction", ADA Louise Huxtable-George Braziller Inc. NY (1977)
2. Philip Drew, Robert Fischer, * Tensile Architecture¹, Mc Graw Hill Boots (1979)
3. Thomas Herzog, * Pneumatic Structure-A Hand Book for Architects and Engineers", Crossing Lockwood and Ltd. London (1961)
4. Robert E. Fischer, * New Structures" Mc Graw Hill Boots, (1964)

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B.ARCH V SEMESTER X

AR- 1001 STUDIO X : ARCHITECTURAL DESIGN THESIS

TEACHING SCHEME: L T P EXAMINATION SCHEME:

0 0 25 Cont. Eval. Asses. 350 MARKS
End SeraAsaea. 500 MARKS

STUDIO WORK:

1. Research thesis to evaluate the student's ability to explore in the field of architecture.
2. In depth investigation in the chosen area.
3. Analysis of investigation, influence to establish underlying principles.
4. Evaluation of existing theory in new context.
5. Establishment of hypothesis - design and its substantiation.
6. Project Work ; The area of work chosen by student with the guidance of a faculty member can be in any of the following. Architectural theory, history, design determinants, design language, design evaluation, building types, urban design housing, interior design, landscape design, building technology, environmental science, professional practice or any other related field accepted by the school as relevant to the field.

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B.ARCH V SEMESTER X

AR- 1002 PROFESSIONAL PRACTICE

TEACHING SCHEME:

L	T	P	EXAMINATION SCHEME:		
3	2	0	Theory Tutorial	100 Marks 50 Marks	(3 hre.)

THEORY

1. Role of responsibilities of a professional. Existing patterns of professional practice, their comparison and interrelationship, and future professional directions.
2. Contract management, site supervision, role of client, contractor, sub contractor, consultants and clerk of works and their responsibility liabilities and indemnity.
3. Various professional associations, their roles and responsibilities, professional ethics, fee structure, competitions.
4. Office organization and management, expense structure, and overheads, role of design staff and supporting managerial staff, employer, employee relationships, training responsibilities, accounts, book keeping, computer software, statutory requirements.

TUTORIALS/STUDIO WORK:

Assignments are formulated to cover the above theory.

REFERENCES:

1. The Indian Institute Of Architects "Hand Book on Professional Practice" The Architects Publishing Corporation Of India, Bombay
2. Dutta B.N. , " Estimating and Costing in Civil Engineering: Theory and Practice", UBS Publishers' Distributors Ltd. New Delhi (1993)