SHRI VAISHNAV INSTITUTE OF ARCHITECTURE, INDORE

COURSE STRUCTURE FOR M.PLAN, 2019-2020



SEMESTER 1

MPLN 101 LOCAL AREA PLAN

							TE/	ACHI	NG SCHE	ME	EV	TION		
- 10	SR. NO.	COURSE	COURSE AREA	COURSE TYPOLOGY	NAME OF THE COURSE	L	Т	S	CREDIT	TOTAL CLASS HOURS	IA	EV 40%		TOTAL MARKS
											11/1			
	1	MPLN 101	PL	STUDIO	LOCAL AREA PLAN STUDIO	-	ı	15	15	15	300	200	500	500

 $L-THEORY; S-STUDIO\ , T-TUTORIAL; C-CREDIT; HRS: HOURS\ ; MST-MIDTERM TEST\ , A.MST-AVERAGE OF MIDTERM\ , ESUE-END SEMESTER UNIVERSITY EXAMINATION; IA-INTERNAL ASSESSMENT PROGRESSIVE; SS-FOLIO FINAL (SESSIONAL INTERNAL)\ , EV-EXTERNAL VIVA VOICE, RVW-INTERMEDIATE REVIEW$

OBJECTIVE OF THE COURSE

The studio is an introduction to urban planning, aiming at bringing together all the students of different backgrounds to a common platform. The objective of the studio is to understand urban structure, form and functioning at different scales in a city through various planning related. The course further gives emphasis on site visits related with planning related exercise.

COURSE OUTCOME

After the completion of the course the students should be able to have:

- Working knowledge of how actual planning projects are functioning.
- Collaboratively develop planning solutions to real situations confronted by communities.
- Ability to carry out policy analysis and policy planning.

COURSE CONTENT

The studio program is divided into two parts. The first part involves learning of basic techniques such as GIS applications, remote sensing and statistical applications. The second part contains a number of plan preparation assignments.

- Module 1: GIS Applications
 - Coordinate system and geo-coding, vector data structure and algorithms, raster data structure and algorithms, data bases for GIS concepts, error modelling and data uncertainty, decision making through GIS, constructing spatial data infrastructure and spatial information system; National Urban Information system.
- Module 2: Remote Sensing
 - Why remote sensing, aerial and satellite remote sensing, principles of aerial remote sensing, Aerial photo-interpretation, photogrammetry, stereovision, measurement of heights / depths by relief displacement and parallax displacement. Principles of satellite remote sensing, spatial, spectral, temporal resolutions. Applications in planning, population estimation, identification of squatter / unauthorized areas, sources of pollution, etc., spatial resolution related to level of Planning

Module 3: Demography

Sources of demographic data in India, Settlement type, growth pattern and structure: urban settlement analysis, Concentration: spatial, vertical and size, peri-urban sprawl, economic base; Rural Settlements – Size, occurrence and character, transformation, Policies towards various size class settlements.

Population structure and composition – Age, sex, gender, marital status, caste, religion, literacy level, etc.; Age - sex ratio, structure, pyramid; dependency ratio; occupational structure; Fertility; mortality, migration analysis, natural growth of population, migration and its implications in spatial planning;

• Module 4: Statistical Applications

General concepts - statistical interference, population and samples variables, Sampling, simple statistical models, Measures of central Tendency, Measures of Dispersion, Measures of shape of distribution, Correlation and regression

ASSIGNMENTS

• Area Appreciation (individual assignment)

The aim of the area appreciation exercise is to enable the students to understand and contextualize the location of the area in relation to the city, zone and area in which the particular place is situated. This is done in relation to the socio-economic, spatial and cultural characteristics of that city, zone, location, etc. The main purpose is to make the students appreciate the locational attributes of land parcels for future development in a city. Due to the size of the area, this exercise is done in groups of students being assigned to a particular area.

The following planning issues at area level should be identified:

- o Review of the Master Plan / Zonal / Area plan in relation to the selected areas.
- o Appreciation / Analysis of ward level data.
- o Perception of areas in terms of legal / illegal / authorized / unauthorized, Slums, Urban Aesthetics.
- Social Categorizations of people Type of population living, people's perception about area and its planning problems.
- Land use including Agriculture land and land use conflicts, extent (%) of broad land use such as commercial, industrial, residential, institutional and recreational.
- Extent of formal / informal activities present in the area including their location and conflicts.
- o General land tenure of the area and land value for different uses.
- Major types of transport, type of roads, hierarchy of roads, type of transport modes used.
- Amenities: Location of Social and Physical infrastructure and their problems as perceived by local population. Look for specific infrastructure such as Water supply, drainage (water logging areas), waste collection and disposal system, sanitation, etc.
- Environmental Issues: Open Spaces Availability and extent of open space to builtup area, garbage disposal, encroachment (through photographic evidences and sketches).
- Locating the study area in the zone, city and regional context with respect to all the above aspects.
- Site Planning (individual assignment)

Site planning is a process whereby the optimum utilization of potential of site is considered recognizing the constraints the site has. It uses 3 dimensional space of the site and the associated locational advantages, human activities and the regulations that are assigned to a particular site.

The site is developed using a set of standards / norms in a given context which varies from location to location. A student is expected to understand the intricacies and interface between various variables such as soil conditions, topography, environmental dimensions, location, spatial standards applicable to the site, etc.

• City Development Plan (Group assignment)

A City is a multi-dimensional, dynamic and a futuristic space. Understanding city involves appreciating this multi direction, and include them in the city making process. A job of physical planner does not merely understand the current conflict in development but to emerge out of this and to come out with a vision for the city. To arrive at this vision, a planner needs to understand the dynamics of various components of the city and how and what level interventions can be made to achieve that vision.

A group of students are expected to study a city in terms its present problems and issues and project a futuristic vision in terms of scenario building.

GUIDELINES

- Assignments /Tasks are to be set from the entire syllabus.
- The topic of the project is to be displayed on Institute Notice Board fifteen days or a week prior to the submission of the assignment/task.
- Question paper should be set from the entire syllabus.
- 5% marks weightage is given to attendance for this course.
 - o 90% attendance and above 5%
 - o 80% attendance and above 4%
 - o 75% attendance and above 3%
 - o Below 75% attendance no marks.

MPLN 102 PLANNING HISTORY AND THEORY

		COURSE AREA	COURSE TYPOLOGY		TEACHING SCHEME					EVALUATION						
								CREDIT	TOTAL CLASS HOURS	THEORY						FVAAA
R. O.	COURSE			NAME OF THE COURSE	L	Т	S			MST 1 10%	MSI 1 MSI 2 A. MSI OR		SS 50% OR 30%	ESUE 40%	TOTAL MARKS	EXAM DURATION (HRS)
											II	TV		EXT		
2	MPLN 102	PL	STUDIO	PLANNING HISTORY AND THEORY	3	-	-	3	3	10	10	10	50	40	100	3

 $L-THEORY; S-STUDIO\ , T-TUTORIAL; C-CREDIT; HRS: HOURS\ ; MST-MIDTERM TEST\ , A.MST-AVERAGE OF MIDTERM\ , ESUE-END SEMESTER UNIVERSITY EXAMINATION; IA-INTERNAL ASSESSMENT PROGRESSIVE; SS-FOLIO FINAL (SESSIONAL INTERNAL)\ , EV-EXTERNAL VIVA VOICE, RVW-INTERMEDIATE REVIEW$

OBJECTIVES OF THE COURSE

The course aims at understanding the key concepts in the history of urban planning in order to develop the ability to compare and position current planning ideas to the historical context. The objective is to develop an understanding of common planning tools, their historical development, assumptions and mechanisms.

COURSE OUTCOME

After the completion of the course the students should be able to have:

- In-depth knowledge about existing planning models and their range of applications.
- Knowledge of existing objectives of planning practices across the world.

COURSE CONTENT

- Definitions and Objectives of Planning
 - Definitions of town and country planning; Orthodoxies of planning; Goal formulation, objective, scope, limitations
 - o Sustainability and rationality in planning; Components of sustainable urban and regional development.
- Planning History
 - o Town planning in ancient India; Medieval, pre-independence, post-independence cities.
 - Concepts of landmark, axis, orientation; City form as a living space; City as an organism: a physical, social, economic and political entity; City as a political statement: New Delhi, Chandigarh, Washington D.C. Brasilia etc;
 - Dynamics of the growing city, impact of industrialization and urbanization, metropolis and megalopolis.
- Theories of City Development and Planning Theories
 - Theories of city development including Concentric Zone Theory, Sector Theory, Multiple Nuclei Theory and other latest theories;
 - Land use and land value theory of William Alonso; Ebenezer Howard's Garden City Concept; and Green Belt Concept;
 - Contribution of individuals to city planning: Lewis Mumford, Patrick Geddes, Peter Hall, etc;
 - Emerging Concepts: global city, inclusive city, safe city, etc.; City of the future and future of the city; Shadow cities, divided cities;

o Models of planning: Advocacy and Pluralism in Planning; Systems approach to planning: rationalistic and incremental approaches, mixed scanning and middle range planning; Equity planning; Political Economy Model; Types of development plans, plan making process.

GUIDELINES

- Assignments /Tasks are to be set from the entire syllabus.
- The topic of the project is to be displayed on Institute Notice Board fifteen days or a week prior to the submission of the assignment/task.
- Question paper should be set from the entire syllabus.
- Marks breakup:
 - o 5 marks (attendance)
 - o 10 marks (MST 1 and 2 Assignment)
 - o 45 marks (Internal Assignment)
 - o 40 marks (End Semester Assignment)
- Attendance weightage subdivided in the following way:
 - o 90% attendance and above 5 marks.
 - o 80% attendance and above 4 marks.
 - o 75% attendance and above 3 marks.
 - o Below 75% attendance no marks.

REFERENCE READINGS

- Planning Theory, Healey P., Pergamon Press
- Planning Theory, Allmendinger Philip, Palgrave MacMillan
- Cities of the World: World Regional Urban development, Brunn S.D.et all.
- City Assembled: The Elements of Urban form through History, Kostof Spiro, Thames and Hudson
- Contemporary Urban Planning, Levy John M, Longman
- Cities of Tomorrow: An Intellectual History of Urban Planning and Design in the Twentieth Century, Hall Peter
- Urban and Regional Planning Since Independence: Retrospect and Prospect: Technical papers, National Town and Country Planners Congress, Mysore, Ministry of Urban Affairs and Employment
- Urban Planning: Theory and Practice, Rao M.P., CBS Publishers
- The Oxford Handbook of Urban Planning, Weber Rachel et all, Oxford University Press
- Urban Pattern: City Planning and Design, Gallion, Arthur B. and Eisner Simon, CBS Publishers
- Planning Theory, FALUDI, ANDREAS
- Landuse Planning: Techniques of Implementation, PATTERSON, T WILLIUM
- Planning Theory, Techniques ITPI Reader volume

MPLN 103 ECONOMICS AND URBAN SOCIOLOGY

						TE/	ACHI	NG SCHE	ME		EV	ALUATI				
										THEORY						E)(0 0 0
SR. NO		COURSE AREA	COURSE TYPOLOGY	NAME OF THE COURSE	L	т	S	CREDIT	TOTAL CLASS HOURS	MST 1 10%	MST 2 10%	A. MST 10%	SS 50% OR 30%	ESUE 40%	TOTAL MARKS	EXAM DURATION (HRS)
											II	NT		EXT		
3	MPLN 103	PL	THEORY	ECONOMICS AND URBAN SOCIOLOGY	3	-	-	3	3	10	10	10	50	40	100	3

 $L-THEORY; S-STUDIO\ , T-TUTORIAL; C-CREDIT; HRS: HOURS\ ; MST-MIDTERM TEST\ , A.MST-AVERAGE OF MIDTERM\ , ESUE-END SEMESTER UNIVERSITY EXAMINATION; IA-INTERNAL ASSESSMENT PROGRESSIVE; SS-FOLIO FINAL (SESSIONAL INTERNAL)\ , EV-EXTERNAL VIVA VOICE, RVW-INTERMEDIATE REVIEW$

OBJECTIVE OF THE COURSE

The course aims at introducing the concepts of Economics and Urban Sociology which are essential inputs to the planning profession. To develop knowledge to identify and address the needs of various segments of the population so as to ensure that all have an equal opportunity to both change and benefit.

COURSE OUTCOME

After the completion of the course the students should be able to have:

- Incorporate the knowledge of different planning theories and paradigms in approaching socio-economic planning process.
- Address planning needs of different segments of the population and their distinctive issues and needs with respect to living and working in the urban environment.

COURSE CONTENTS

Urban Sociology:

- Sociological concepts and methods, man and environment relationships; Socio-cultural profile of Indian society and urban transformation.
- Tradition and modernity in the context of urban and rural settlements; Issues related to caste, age, sex, gender, health safety, and marginalized groups.
- Displacement, resettlement and rehabilitation due to compulsory land acquisition.
- Social problems of slums and squatters communities, urban and rural social transformation and their impact on social life, safety, security.
- Crimes in urban areas and their spatial planning implications, social structure and spatial planning.
- Role of socio-cultural aspects on growth patterns of city and neighbourhood communities.
- Social planning and policy, and community participation.
- Marginalization and concepts of inclusive planning, and gender concerns in planning.
- Settlement Policy: National Commission on Urbanization, Rural Habitat Policy and experiences from developing countries regarding settlement structure, growth and spatial distribution.

Economics:

• Concepts of demand, supply, elasticity and consumer markets; concept of revenue costs.

- Economies of scale, economic and social costs, production and factor market.
- Different market structures and price determination; market failures, cost-benefit analysis, public sector pricing.
- Determinants of national income, consumption, investment, inflation, unemployment, capital budgeting, risk and uncertainty, and long-term investment planning.
- Economic growth and development, quality of life.
- Human development index, poverty and income distribution, employment and livelihood.
- Economic principles in land use planning
- Policies and strategies in economic planning, balanced versus unbalanced growth, public sector dominance.
- Changing economic policies, implications on land.

GUIDELINES

- Assignments /Tasks are to be set from the entire syllabus.
- The topic of the project is to be displayed on Institute Notice Board fifteen days or a week prior to the submission of the assignment/task.
- Question paper should be set from the entire syllabus.
- Marks breakup:
 - o 5 marks (attendance)
 - o 10 marks (MST 1and 2 Assignment)
 - o 45 marks (Internal Assignment)
 - o 40 marks (End Semester Assignment)
- Attendance weightage subdivided in the following way:
 - o 90% attendance and above 5 marks.
 - o 80% attendance and above 4 marks.
 - o 75% attendance and above 3 marks.
 - o Below 75% attendance no marks.

REFERENCE READINGS

Urban Sociology

- Sociology, Anthony Giddens, Wiley
- Sociology, John J. Macionis, Pearson
- Urban Sociology: Images and Structure, Flanagan, William G., Prentice Hall
- Urban Problems in Sociological Perspective, Shannon, Thomas R., Waveland Press Inc
- The Metropolis and Mental Life, Simmel, Georg, New York: Free Press
- Key Concepts in Urban Studies, M. Gottdiener, Sage London
- Sociological Thought, Abrahm M. F. and Morgan J. H., MacMillan India, Madras
- The Oxford Companion to Sociology and Social Anthropology, Das Veena, Vol. I and II, OUP, New Delhi
- Social Change in Modern India, Srinivas M. N., Oxford University Press, Delhi.
- A Subaltern Studies Reader, Guha R., Oxford University Press, New Delhi
- The Sage Handbook of Sociology, Bryn Turner et all, Sage
- Capability and Well-Being, Sen, Amartya and M. Nussbaum. Oxford Clarendon Press
- Inclusive Growth In India, R.U. Singh A.K. Thakur, Deep and Deep Publications
- Sen's Capability Approach and Gender Inequality: Selecting Relevant Capabilities. Feminist Economics Robeyns, Ingrid

- Planning a Barrier Free Environment, Office of the Chief Commissioner for Persons with Disabilities, India
- Social areas in cities: Spatial processes and form / HERBART, D T
- Social Theory for Planning / NAILY, JOE

Economics:

- Economics, Paul A. Samuelson et all, Tata Mc Graw Hill Publication
- Micro Economics, Dominick Salvatore, Schaum's Outline Series, Mc Graw Hill
- Micro Economics, N.C. Ray, Macmillan
- Micro Economics, Anindya Sen, Oxford University Press
- Economics, Alec Chrystal et all, Oxford University Press
- Economics An Analytical Introduction, Amos Witztum, Oxford University Press
- General Economics, Deepashree, Tata Mc Graw Hill Publication
- Economic Planning / AGARWAL, A.N. Economic Planning in Developing Countries / JOSEPH, BONGER
- Economic for Urban Social Planning / HENDON, WILLIUM. S
- Economics of Regional Development & Planning in Third World Countries / PATTANAIK, S.C
- Economics A Primer for India, G. Omkarnath, Orient Blackswan

MPLN 104 PLANNING TECHNIQUES

						TEACHING SCHEME EVALUATION										
										THEORY						E)(0.0.0
SR. NO.	COURSE	COURSE AREA	COURSE TYPOLOGY	NAME OF THE COURSE	L	Т	S	CREDIT	TOTAL CLASS HOURS	TOTAL MST 1 MST 2 A. MST SS 50 OF	SS 50% OR 30%	ESUE 40%	TOTAL MARKS	EXAM DURATION (HRS)		
											II.	NT		EXT		
4	MPLN 104	PL	THEORY	PLANNING TECHNIQUES	3	-	-	3	3	10	10	10	50	40	100	3

 $L-THEORY; S-STUDIO\ ,\ T-TUTORIAL; C-CREDIT; HRS:\ HOURS\ ;\ MST-MIDTERM\ TEST\ ,\ A.MST-AVERAGE\ OF\ MIDTERM\ ,\ ESUE-END\ SEMESTER\ UNIVERSITY\ EXAMINATION;\ IA-INTERNAL\ ASSESSMENT\ PROGRESSIVE;, SS-FOLIO\ FINAL\ (SESSIONAL\ INTERNAL\)\ ,\ EV-EXTERNAL\ VIVA\ VOICE, RVW-INTERMEDIATE\ REVIEW$

OBJECTIVE OF THE COURSE

The course aims at introducing techniques used at various stages in planning from preliminary to advanced and their methods of selection. It focuses on familiarising planning practices in India and their manifestations in urban and regional front. Appropriate Software applications in CAD and GIS would also be taught as part of this course.

COURSE OUTCOME

After the completion of the course the students should be able to have:

- Basic knowledge about existing planning techniques and their range of applications.
- Understanding of analytical tools and techniques for assessing condition of planning areas.
- Ability to examine existing standards of planning practices in India

COURSE CONTENT

- Survey Techniques and Mapping
 - O Data base for physical surveys including land use, building use, density, building age, etc., and socio-economic surveys;
 - O Survey techniques; Land use classification or coding and expected outputs; Techniques of preparing base maps including understanding the concepts of scales, components and detailing for various levels of plans like regional plan, city plan, zoning plan, and local area plan.
 - O Data Base for Physical surveys (including land use / building use / density / building age, etc.) and Socio-economic surveys; Questionnaire formulation, Sampling and survey techniques, etc. Land use classification / coding.

Analytical Methods

- Classification of regions, delineation techniques of various types of regions, analysis of structure of nodes, hierarchy, nesting and rank size;
- Scalogram, sociogram, etc.;
- o Planning balance sheet;
- Threshold analysis;
- o Input output analysis, SWOT analysis;

Demographic Methods

- o Methods of population forecasts and projections;
- Lorenz Curve, Ginni Ratio, Theil's index, rations: urban rural, urban concentration, metropolitan concentration;
- Location dimensions of population groups social area and strategic choice approach inter connected decision area analysis.

- Planning Standards
 - o Spatial standards, performance standards and benchmarks, and variable standards;
 - o UDPFI guidelines, zoning regulations and development control rules and regulations.

GUIDELINES

- Assignments /Tasks are to be set from the entire syllabus.
- The topic of the project is to be displayed on Institute Notice Board fifteen days or a week prior to the submission of the assignment/task.
- Question paper should be set from the entire syllabus.
- Marks breakup:
 - o 5 marks (attendance)
 - o 10 marks (MST 1 and 2 Assignment)
 - o 45 marks (Internal Assignment)
 - o 40 marks (End Semester Assignment)
- Attendance weightage subdivided in the following way:
 - o 90% attendance and above 5 marks.
 - o 80% attendance and above 4 marks.
 - o 75% attendance and above 3 marks.
 - o Below 75% attendance no marks.

REFERENCE READINGS

- Urbanisation and Urban Systems in India, Ramchandran R. Oxford University Press
- Cities Urbanisation and Urban Systems, Sidddhartha K. and Mukherjee S., Kisalaya Publications
- Regional Planning, Glasson J., Open University Press
- Economic and Social Geography Made Simple, Knowles R. and Wareing J., Rupa and Company
- Concepts and Techniques of Geographic Information Systems, Lo C.P. and Yeung A.K.W., PHI Learning Private Limited
- Planning Techniques for AITP, Reader on Institute of Town Planners India
- UDPFI Guidelines Volume 1, Ministry of Urban Affairs and Employment Govt. of India, New Delhi
- Remote Sensing and Image Interpretation, Thomas M. Lillesand et all, John Wiley and Sons Ltd.
- Remote Sensing and GIS, Basdudeb Bhatta, Oxford University Press
- Spatial Analysis, Mark R. T. Dale, Marie-Josée Fortin, Cambridge University Press
- An introduction to town planning technique / MARGARET, ROBERT
- Planning and forecasting technique: an introduction to macroeconomics applications / RABINSON, J N
- Planning Theory / FALUDI, ANDREAS
- Landuse Planning: Techniques of Implementation / PATTERSON, T WILLIUM
- Planning Theory / Techniques ITPI Reader volume

MPLN 105 INFRASTRUCTURE PLANNING

							TE/	ACHI	NG SCHE	ME		EV	ALUATI				
SR. NO.		COURSE	COURSE AREA	COURSE TYPOLOGY	NAME OF THE COURSE	L	Т	S	CREDIT	TOTAL CLASS HOURS	MST 1 10%	MSI 1 MSI 2 A. MSI 10% 10%		SS 50% OR 30%	40% MARK		EXAM DURATION (HRS)
												ll ll	VT		EXT		
	5	MPLN 105	PL	THEORY	INFRASTRUCTURE PLANNING	3	-	-	3	3	10	10	10	50	40	100	3

 $L-THEORY; S-STUDIO\ ,\ T-TUTORIAL; C-CREDIT; HRS:\ HOURS\ ;\ MST-MIDTERM\ TEST\ ,\ A.MST-AVERAGE\ OF\ MIDTERM\ ,\ ESUE-END\ SEMESTER\ UNIVERSITY\ EXAMINATION;\ IA-INTERNAL\ ASSESSMENT\ PROGRESSIVE;, SS-FOLIO\ FINAL\ (SESSIONAL\ INTERNAL\)\ ,\ EV-EXTERNAL\ VIVA\ VOICE, RVW-INTERMEDIATE\ REVIEW$

OBJECTIVE OF THE COURSE

The course is an introduction to infrastructure and transport planning design principles. The focus of infrastructure part of the course is on principles of design of utilities and services in urban and regional context and familiarising with Indian standards of design. The objective of transport planning is to familiarise the students with geometric design of road networks, traffic characteristics and transportation issues.

COURSE OUTCOME

After the completion of the course the students should be able to have:

- Knowledge relating to process of delivery of urban services and mitigating gaps in infrastructure provision.
- Ability to relate with experience-based understanding of planning theory and practice through exposure to concepts, methodologies, field techniques and applications.

COURSE CONTENT

- Role of Infrastructure in Development
 - o Elements of Infrastructure (physical, social, utilities and services).
 - o Basic definitions, concepts, significance and importance.
 - o Data required for provision and planning of urban networks and services.
 - o Resource analysis, provision of infrastructure, and land requirements.
 - o Principles of resource distribution in space.
 - Types, hierarchical distribution of facilities, Access to facilities, provision and location criteria, Norms and standards, etc.
- Planning and Management of Water, Sanitation and Storm Water
 - Water sources of water, treatment and storage, transportation and distribution, quality, networks, distribution losses, water harvesting, recycling and reuse, norms and standards of provision, design guidelines, institutional arrangements, planning provisions and management issues.
 - o Sanitation points of generation, collection, treatment, disposal, norms and standards, low cost options, grey water disposal, DEWATS, institutional arrangements, planning provisions and management issues.
 - O Storm water rainfall data interpretation, points of water stagnation, system of natural drains, surface topography and soil characteristics, ground water replenishment, storm water collection and disposal, norms and standards, institutional arrangements, planning provisions and management issues.

- Planning and Management of Municipal Wastes, Power and Fire
 - Municipal and other wastes generation, typology, quantity, collection, storage, transportation, treatment, disposal, recycling and reuse, wealth from waste, norms and standards, institutional arrangements, planning provisions and management issues.
 - o Power Sources of power procurement, distribution networks, demand assessment, norms and standards, planning provisions and management issues.
 - Fire History of fire hazards, vulnerable locations, methods of fire fighting, norms and standards, planning provisions and management issues. Planning for fire protection, services and space standards, location criteria; Planning for Education, health, civic, cultural infrastructure
- Basics of transport planning

GUIDELINES

- Assignments /Tasks are to be set from the entire syllabus.
- The topic of the project is to be displayed on Institute Notice Board fifteen days or a week prior to the submission of the assignment/task.
- Question paper should be set from the entire syllabus.
- Marks breakup:
 - o 5 marks (attendance)
 - o 10 marks (MST 1 and 2 Assignment)
 - o 45 marks (Internal Assignment)
 - o 40 marks (End Semester Assignment)
- Attendance weightage subdivided in the following way:
 - o 90% attendance and above 5 marks.
 - o 80% attendance and above 4 marks.
 - o 75% attendance and above 3 marks.
 - o Below 75% attendance no marks.

REFERENCE READINGS

- Regulation and the Management of Public Utilities, C. S. Morgan, Gale
- Water Supply Engineering, S. K. Garg, Khanna Publishers
- Manual on Sewerage and Sewage Treatment, CPHEEO
- Urban Planning Manual, AIILGS Reader
- Solid Waste Management, Krishana Gopi Sanoop P, Sasikumar K, Phi Learning
- Solid Waste Management, Dewan, Sudarshan, Discovery Publishing House
- Telecommunication Management Networks (TMN) Implementation, Amani Omer, Lambert Academic Publishers 6.
- Fire fighting: Management and Techniques, Overton Frank, Inkata
- Water Supply Engineering: Environmental Engineering I, Arun Kumar Jain, Ashok Kumar Jain, B. C. Punmia, Laxmi Publications

MPLL 106 HOUSING AND ENVIRONMENTAL PLANNING

			COURSE	NAME OF THE		TE/	CHI	NG SCHE	ME	EVALUATION						
										THEORY						FVAAA
SR.		COURSE							TOTAL	MST 1	MCTO	A. MST	SS 50%	FCLIE	TOTAL	EXAM
NO.	COURSE	AREA	TYPOLOGY	COURSE	L	Т	S	CREDIT	CLASS				OR	ESUE	MARKS	DURATION
		711.271		3332					HOURS	10%	10%	10%	30%	40%		(HRS)
											1	NT		EXT		
6	MPLN 106	PL	THEORY	HOUSING AND ENVIRONMENTAL PLANNING	3	-	-	3	3	10	10	10	50	40	100	3

 $L-THEORY; S-STUDIO\ , T-TUTORIAL; C-CREDIT; HRS: HOURS\ ; MST-MIDTERM TEST\ , A.MST-AVERAGE OF MIDTERM\ , ESUE-END SEMESTER UNIVERSITY EXAMINATION; IA-INTERNAL ASSESSMENT PROGRESSIVE; SS-FOLIO FINAL (SESSIONAL INTERNAL)\ , EV-EXTERNAL VIVA VOICE, RVW-INTERMEDIATE REVIEW$

OBJECTIVE OF THE COURSE

The course is an introduction to the issues of urban development relevant to housing and environmental planning in India. The objective of this course is to acquaint the students with the aspects related to housing scenario, needs, strategies, policies, etc. Also create an understanding of how decision making depends on the natural environment, social, political, economic and governance factors to achieve sustainable outcomes.

COURSE OUTCOME

After the completion of the course the students should be able to have:

- Knowledge about housing supply system and determining factors in India.
- Understanding of the impact of environmental planning on various planning techniques and practices.

COURSE CONTENTS

Housing:

- Shelter as a basic requirement, determinants of housing form, Census of India definitions, Introduction to policies, housing need, demand and supply, dilapidation, structural conditions, materials of constructions, housing age, occupancy rate, crowding, housing shortage, income and affordability, poverty and slums, houseless population.
- Various housing typologies viz. traditional houses, plotted development, group housing, multi-storied housing, villas, chawls, etc., slums and squatters, night shelters, public health issues related to housing, various theories of housing, concept of green housing, green rating of housing projects.
- Housing as social security, role of housing in development of family and community well-being, status and prestige related to housing, safety, crime and insecurity, deprivation and social vulnerability, ghettoism, gender issues, housing for the elderly.
- Contribution of housing to micro and macro economy, contribution to national wealth and GDP, housing taxation, national budgets, fiscal concessions, forward and backward linkages.
- Understanding housing as an important land use component of city plan / master plan, considerations for carrying out city level housing studies, projections, land use provisions; Suitability of land for housing, housing stress identification, projecting housing requirements, calculating housing shortages, housing allocation.
- Approaches to neighbourhood living in traditional and contemporary societies, elements of neighbourhood structure, Planning and design criteria for modern neighbourhoods, norms

and criteria for area distribution, housing and area planning standards, net residential density and gross residential density, development controls and building byelaws, UDPFI guidelines, NBC 2005 provisions and Case studies of neighbourhood planning.

Environment:

- Man and Environment Changing Perspectives in Man-Environment Relationship with focus on Issues of Population, Urbanization, Resource Depletion and Pollution
- Concept of Ecology; Fundamentals of Ecosystem—Its Structure and Function
- Environmental Degradation (Environmental Concerns and Challenges) and Its Impact on Various Ecosystems
- Planning for Environmentally Sensitive Zones (Resources Availability, Settlements Pattern, Problems and Potentials, Regulating Mechanisms for Development)
- Tools and Techniques for Environmental Planning and Management- Introduction to Environmental Impact Assessment, Strategic Environment Assessment and Environmental Management Plans
- Environmental Policies and Initiatives Including Policies, Strategies, Protocols, Treaties
- Sustainable Development (Concept and Methods)

GUIDELINES

- Assignments /Tasks are to be set from the entire syllabus.
- The topic of the project is to be displayed on Institute Notice Board fifteen days or a week prior to the submission of the assignment/task.
- Question paper should be set from the entire syllabus.
- Marks breakup:
 - o 5 marks (attendance)
 - o 10 marks (MST 1 and 2 Assignment)
 - o 45 marks (Internal Assignment)
 - o 40 marks (End Semester Assignment)
- Attendance weightage subdivided in the following way:
 - o 90% attendance and above 5 marks.
 - o 80% attendance and above 4 marks.
 - o 75% attendance and above 3 marks.
 - o Below 75% attendance no marks.

REFERENCE READINGS

Housing:

- Housing : Changing Needs and New Directions, V. Gandotra, M. Shukul, N. Jaju and N. Jaiswal, Authors press
- Housing and Urbanisation- A study of India, Cedric Pugh, Sage Publications, New Delhi
- Housing Laws in India- Problems and Remedies, P.K.Sarkar, Eastern Law House Private Ltd.
- National Housing Policy, GOI, New delhi
- Reading Material on Housing, K. Thomas Poulose, ITPI, India
- Understanding Housing Policy, Brain Lund, The Policy Press, Great Britain

- Urban Development and Housing in India- 1947 to 2007, Rishi Muni Dwivedi, New Century Publications
- Housing Policies and Related Acts and Schemes of Government of India
- Holding Their Ground: Secure Land Tenure for the Urban Poor in Developing Countries, Durand-Lasserve, Royston L, Earthscan Publication, UK
- Plotting, Squatting, Public Purpose and Politics, Land Market Development, Low Income Housing and Public Intervention in India, Baken, Robert Jan, King's SOAS Studies in Development Geography
- Shadow Cities: A Billion Squatters, a New Urban World, Neuwirth, Robert Taylor & Francis Group
- The Urban Housing Manual: Making Regulatory Frameworks Work for the Poor, Payne, Geoffrey and Majale, Michael, Earthscan Publication, UK

Environment:

- Fundamentals of Ecology, Odum, E.P., Barrett, G.W., Brewer, R., Thomson Brooks,
- Ecology, Impact Assessment and Environmental Planning, Westman W., John Wiley and Sons
- Integrated Environmental Planning, James K. Lein, Blackwell Publishing
- AITP Reader on Ecology & Resource Development, AITP
- AITP Reading Material on Environmental Planning and Design, Prof A. K. Maitra, SPA Delhi
- Environmental Engineering, Howard S. Peavy, Tata Mc Grawhill