

A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Master of Planning (Urban Planning)- Syllabus

MASTER OF PLANNING (URBAN PLANNING)

APJ ABDUL KALAM
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APJ Abdul Kalam Technological University

SYLLABUS

Estd.



JULY 2016

Branch: *Architecture*

Stream: *M.Planning(Housing)*

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Course code	Course Name	L-T-P - Credits	Year of Introduction
PL6101	Urban Planning: History, Theory & Systems	2-1-0-3	2016
Course Objectives			
<ul style="list-style-type: none"> • To introduce the discipline of planning and planning history • To expose planning theory and practice • To make aware of the institutional mechanism involved in planning and implementation process 			
Syllabus			
Introduction to planning, Overview of planning from pre history to current, Planning theories, Urbanisation in India and evolution of planning, Institutional mechanisms for planning in India			
Expected outcome.			
<p>Students will be able to</p> <ol style="list-style-type: none"> i. Understand the planning process, theory and practice and its role in planning of cities ii. Appreciate of the role of historical developments in planning and its evolution and trace these influences to the current situation iii. Understand the institutional mechanisms involved in urban planning iv. Develop capacity to understand multiple often conflicting factors to be balanced in planning for an urban area 			
References:			
<ol style="list-style-type: none"> 1. Arthur B. Gallion (2003) The Urban Pattern 5th edition, CBS Publishers & Distributors. 2. AEJ Morris (2013) History of Urban Form Before the Industrial Revolution 3. Urban and Regional Development Plans Formulation & Implementation Guidelines (2014) Ministry of Urban Affairs & Employment, Govt. of India, New Delhi 4. Aidan Southall (1998) The City in Time and Space Cambridge University Press 5. Le Corbusier Courier Corporation (1987) The City of To-morrow and Its Planning 6. John M. Levy (2011) Planning theory, Contemporary Urban Planning,9th Ed., Upper Saddle River, NJ 7. Ebenezer Howard (1965) Garden Cities of Tomorrow. London: Faber and Faber 8. Ernest R. Alexander (1992), Approaches to Planning: Introducing Current Planning Theories, Concepts and Issues. Philadelphia: Gordon and Breach Science Publishers 9. R. Ramachandran (1991), Urbanization and urban systems in India, Oxford University Press 10. Peter Hall, Mark Tewdwr-Jones (2010) Urban & Regional Planning, Routledge 11. Jane Jacobs (1989) Death and Life of American cities, Knopf Doubleday Publishing Group 			

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Course Plan			
Module	Contents	Hours	Sem. Exam Marks
I	Introduction to planning Purpose, scope and limitations of settlement planning; planning process, definitions of key terms in planning - City and region, rural-urban fringe, rural urban continuum, urbanisation and impact on planning, planning process, sub fields within planning – housing, transportation, environmental planning, regional planning, etc	6	15%
II	Planning history – Pre historic & Ancient Need to study history of planning and evolution of human settlements; ; Hunter, gatherer, farmer and formation of organised society; origins and growth of cities; Basic elements of the city; Historic determinants of settlement evolution: - geographical, climatic, socioeconomic, cultural, political, defensive, etc. Human settlements as an expression of civilizations; Ancient civilizations – Egypt, Mesopotamia, Greek,	8	15%
FIRST INTERNAL EXAMINATION			
III	Planning history – Medieval to current Medieval, Renaissance, Industrial and post industrial cities; Contribution of individuals to city planning: Patrick Geddes, Lewis Mumford, Le Corbusier, Frank Lloyd Wright, C.A. Doxiadis, Clarence Perry, Peter Hall, etc;	7	15%
IV	Planning theories Theory of city form: normative models – cosmic, machine, organic; Concentric Zone Theory, Sector Theory, Multiple Nuclei Theory; Ebenezer Howard’s Garden City Concept; Land use and land value theory of William Alonso. Modes of planning – blue print, synoptic, incremental, transactive, advocacy, participatory, mixed scanning; political economy approach - communicative model, new urbanism, and just city. Emerging Concepts: global city, information city, inclusive city, safe city, shadow city, divided city, sustainable city.	7	15%
SECOND INTERNAL EXAMINATION			
V	Urbanisation in India and evolution of planning History of urbanisation in India – ancient, medieval, pre colonial, colonial, new towns; spatial patterns of urbanisation, settlement systems, classification of cities; Character of Indian cities and challenges involved in planning; Urban planning and five year plans, urbanisation policy	7	20%
VI	Institutional mechanisms Planning system in India and changes in institutional provisions over time; authorities and administrative setup and mechanisms for planning, implementation and evaluation and levels of hierarchy; Types of plans – master plans, development plans, etc.; Comparison with planning systems of UK and USA	7	20%
END SEMESTER EXAM			

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Course code	Course Name	L-T-P - Credits	Year of Introduction
PL6102	Socio Economic basis for Planning	1-2-0-3	2016
Course Objectives <ul style="list-style-type: none"> To create an understanding of the relationship between sociology and urban planning & the relative significance of social, geographical, biological and economic factors in shaping the urban environment. 			
Syllabus Nature and scope of sociology – Introduction to the sociological concepts -Sociology of India - Rural-Urban continuum and dichotomy - Socio economic transformation- Basics of Economics – The economy of urban areas-urban resources - Basic concepts in macro-economics- Economics of scale-external economics-National and State five year plans – NITI Ayog Population studies – Migration analysis- population forecasts and projections			
Expected Outcome The student will <ol style="list-style-type: none"> Understand the relationship between sociology and urban planning Have an insight in to social, geographical, biological and economic factors that shapes the urban environment 			
References <ol style="list-style-type: none"> Dr. A.N. Sachithanandan, Socio Economic Base for Planning – Teaching Material prepared by for the Institute of Town Planers, India. Vidya Bhushan & Prof. D.R. Sachdeva – An Introduction to Sociology – Kutab Mahal Publishers. Dr. Ashal A. Bende & Mrs. Tara Kanitkar, Principles of Population Studies, Himalaya Publishing House, Bombay. Dand M. Heu – Society& Population – Eastern Economy Edition, 1978. Smith, Wallace F., Housing: The Social and Economic Elements, University of California Press, 1971. 			
COURSE PLAN			
Module	Contents	Hours	Sem Exam marks
I	Nature and scope of sociology – basic concepts like family, institution, group, association, community, social process, social norms, social structure, social stratification etc. Introduction to the sociological concepts of Marx, Talcot, Parsons, Weber, Durkheim, Riesman, Jacobs.	7	15%

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II	Indian society - Culture, language, religion, caste, rural community and its relationship with urban community, agrarian and industrial societies characteristics of urban and rural poverty.	7	15%
FIRST INTERNAL EXAMINATION			
III	Patterns and trends in Indian urbanization Urban social structure and stratification, dynamics of growth and change. and its role.	8	15%
IV	Socio-economic transformation, social problems of urban poor, slums, social planning, policies and programmes.	6	15%
SECOND INTERNAL EXAMINATION			
V	Basics of Economics – Concepts of economics and economic growth and development, GDP, GNP, per capita income, inclusive development,; demand and supply, production economics, economies of scale; urban and regional growth, land economics and land use planning. Introduction to economics of urban areas; Basic concepts of macro-and micro-economics. Economic and spatial planning in India	6	20%
IV	Population and demographic – population issues in India – source of demographic Population data capturing in India (Population census, Civil Registration systems, Sample registration systems etc). Population characteristics and structure, composition, occupational structure, determinants of population growth, Migration and its implication in settlement development and planning,- population forecasts and projections	8	20 %
END SEMESTER EXAM			



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Course code	Course Name	L-T-P - Credits	Year of Introduction
PL6103	HOUSING	2-1-0-3	2016
Course Objectives <ul style="list-style-type: none"> To expose the various issues related to Housing. To introduce the basic terms, Concepts and Socio-economic dimensions of Housing. 			
Syllabus Concepts and Definitions- Elements of Housing- Habitat Agenda-Social and Economic dimensions of Housing-Housing as components of city's land use-Public housing, social housing - Informal housing- Housing environments and typologies			
Expected outcome. Students will <ol style="list-style-type: none"> be able to appreciate the housing sector as an integral part of overall town planning system have a basic understanding of housing at the neighbourhood and City Level able to appreciate typologies of housing in relation to culture and environment factors. 			
References: <ul style="list-style-type: none"> Habitat Agenda Dwyer, D.J., People and Housing in Third World Cities, 1981 Orient Longman Beyer Glen H., Housing ; a factual Analysis 1958, The Macmillan Co.,NY Abrams, Charles. Man's Struggle for Shelter in an Urbanising World 1964 MIT, Harvard Payne, Geoffrey. Urban Housing in the Thrid World 1977 Routledge and Keegan Paul, USA Al Nichols, Jason Laros. Inside the Civano Project (Green Source Books): A Case study of Large-Scale Sustainable Neighbourhood Development (McGraw-Hill's Green source Series) 2009 McGraw – Hills Professional Douglas Farr. Sustainable Urbanism: Urban Design with Nature John Wiley & Sons Aromar Revi. Shelter in India – Sustainable Development Series 1990 StusiusInc / Advent Books Division International Institute of Energy Conservation Eco housing Assessment criteria Version II USAID 			

COURSE PLAN

Module	Contents	Hours	Sem Exam Marks
I	Concepts and Definitions Concept of housing, Relevance of housing, Shelter as a basic requirement, Determinants of housing, definitions. Habitat Agenda, Global-housing Challenges. Introduction to economics of housing, housing stock, housing shortage, housing need and demand. Affordability – household income & housing – Issues related to housing the poor, houseless population, Slums & Informal settlements.	7	15%
II	Housing typologies based on materials, form and characterises of construction Structural conditions, materials of construction, housing age, dilapidation, obsolescence, occupancy rate, traditional houses, plotted development, group housing, multi-storied housing, villas etc.	7	15%
FIRST INTERNAL EXAMINATION			
III	Social and Economic Dimensions Housing and 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. Gender dimensions of housing, housing for elderly. Contribution of housing sector to national wealth, GDP and employment creation, housing finance. Housing in the National plans	7	15%
IV	Housing and Human Settlements Understanding housing as an important land use component of city development plan /master plan, location of residential zones in relation to other land use zones in the city, considerations for carrying out city level housing studies. Population and household projections, estimation of future housing requirements. Land use provisions, suitability of land for housing. Factors contributing to housing stress and stress analysis.	7	15%
SECOND INTERNAL EXAMINATION			
V	Housing Environment Housing for the poor, Slums and squatters, informal sector housing, Caste, Ethnic and Class groupings & segregation in housing, Access to infrastructure, services and facilities in housing areas – public health issues – Housing Environment and General Welfare – Residential satisfaction & factors contributing to residential satisfaction	7	15%
VI	Theories and Approaches in Housing Green Housing, Sustainable housing, Green Ratings (LEEDS, GRIHA etc.). Climatology in Housing, Ventilation & Lighting, Housing in various climatic regions. Low-rise and high-rise developments, density considerations, Neighbourhood & cluster considerations in traditional and contemporary housing. Housing Norms and Standards: National Building Code, URDPFI Guidelines, CPHEEO (MoUD) Standards, Concept of Habitable Room, Habitable Dwelling Unit.	7	15%
END SEMESTER EXAM			

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Course code	Course Name	L-T-P - Credits	Year of Introduction
AR6101	Research Methodology and Analytical Methods	2-1-0-3	2016

Course Objectives

- To Introduce the various paradigms of research
- To familiarise various research methods, analyses employed, and methods of interpretation of results
- To introduce statistical methods of sampling and analysis
- To familiarise ways of research reporting

Syllabus

Introduction - Research Paradigms - Types of research - Literature studies - Research Design - Research Methods - Types of Analysis - Interpretation - Analytical Methods- Qualitative and quantitative methods -Examples of research methods in relevant fields- Architecture, Planning, Infrastructure Planning, Housing and Urban Design - Statistical methods- Types of sampling – Analysis- Interpretations - Statistical packages.

(One lecture hour per week may be handled by faculty of Mathematics)

Expected outcome.

Students will be able to

- i. Formulate Research questions
- ii. Develop Research Design for their specific Research question
- iii. Carry out primary studies in structured manner
- iv. Identify the appropriate methods for analysis
- v. Prepare research reports, Thesis reports and scholarly articles

References:

1. Babbie Earl (1983), The Practice Of Social Research third edition, Wadsworth Publishing Co., Belmont, California.
2. Creswell John W. (1994) Research Design: Qualitative Approaches , Sage publications.
3. Creswell John W. (2003) Research Design: Qualitative, Quantitative and Mixed Methods Approaches , Sage publications.
4. Denzin, Norman K.; and Lincoln, Yvonna S.; (Eds.). (1994). Handbook of Qualitative Research Sage Publications, London, New Delhi
5. Dwivedi , R.S.(1997) Research Methods in Behavioral Sciences Macmillan India Limited
6. De Vaus D.A (2002) Surveys In Social Research Rawat Publications Jaipur and New Delhi
7. Nachmias, Chava Frankfort & Nachmias, David Research Methods in the Social Sciences St. Martin's Press, New York
8. C.R Kothari, Research Methodology, Sultan Chand & Sons, New Delhi,1990
9. Panneerselvam, "Research Methodology", Prentice Hall of India, New Delhi, 2012.
10. J.W Bames," Statistical Analysis for Engineers and Scientists", McGraw Hill, New York.
11. Leedy P D, "Practical Research: Planning and Design", MacMillan Publishing Co.
12. Day R A, "How to Write and Publish a Scientific Paper", Cambridge University Press, 1989
13. Sople," Managing Intellectual Property: The Strategic Imperative, Prentice Hall of India, New Delhi, 2012.

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COURSE PLAN			
Module	Contents	Hours	Sem Exam Marks
I	Introduction, Research Paradigms, Types of research, Literature studies, Literature map, Identifying gap areas from literature review Development of working hypothesis, Formulating research problem, Referencing styles	8	15%
II	Need for Statistical methods in research, Types of sampling, Sample size, Statistical Analysis, Descriptive, Inferential and Predictive statistics, Data distribution, measures of central tendency and data dispersion <i>(To be handled by faculty of Mathematics)</i>	6	15%
FIRST INTERNAL EXAMINATION			
III	Research Design, Features of a good design, Qualitative and quantitative research designs Examples of research designs in relevant fields- Architecture, Planning, Housing and Urban Design	8	15%
IV	Testing of Hypothesis, Statistical errors in Hypothesis testing, Need for Anova, Chi Square tests, Correlation and Regression, <i>(To be handled by faculty of Mathematics)</i>	6	15%
SECOND INTERNAL EXAMINATION			
V	Methods of data collection – Documents, Observation, Surveys, Experiment, Types of data and measurement Qualitative Research methods, Data collection and analysis, Grounded theory, Ethnography, Phenomenology Types of Analysis, Interpretation and Generalization. Ethics in Research, plagiarism, Intellectual Property rights, Preparation of Research proposals and reports, Dissertation, Thesis, Scholarly articles	9	20%
VI	Statistical analysis using software <i>(To be handled by faculty of Mathematics)</i>	5	20%
END SEMESTER EXAM			

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Course code	Course Name	L-T-P - Credits	Year of Introduction
AR6102	PLANNING TECHNIQUES	1-2-0-3	2016
Course Objectives To make students aware of <ul style="list-style-type: none"> different survey techniques and map preparation analytical methods used in planning different methods of population forecasts and projections Spatial standards, URDPFI guidelines, zoning regulations and development control rules and regulations. 			
Syllabus Survey Techniques and Mapping- Analytical Methods- Demographic Methods- Planning Standards			
Expected outcome. Students will be <ol style="list-style-type: none"> able to prepare base maps , classify and delineate region equipped with necessary information on town planning theories, principles, techniques and methodologies. 			
References: <ol style="list-style-type: none"> Donald A. Kruekeberg and Arthur L. Silvers, Urban Planning Analysis: Methods and Models, John Wiley & Sons Inc. Ian Braken , Urban Planning Methods, Routledge Lewis B. Keeble , Principles and Practice of Town and Country Planning, Estates Gazette Ltd. Margaret Robert, An introduction to Town planning Techniques, Hutchinson Educational, Hutchinson 			
COURSE PLAN			
Module	Contents	Hours	Sem Exam Marks
I	Planning terms and definitions - Planning theories and their applications in settlement planning (Master Plans, Development Plans, Structure Plans physical, economic and social plans) Concepts of Zonal Plans, Area Development Plans and Development Schemes: Urban Renewal, Redevelopment, City Development Plans, Planned Unit Development etc. Concepts of land use, zoning regulations, mixed use development.	7	15%
II	Data base for physical surveys including land use, building use, density, building age, etc., and socio-economic surveys; Sampling and survey techniques; Land use classification or coding and expected outputs;	7	15%

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	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. Land information systems including GIS – aerial photography, remote sensing, photogrammetry, photo interpretation and mapping		
FIRST INTERNAL EXAMINATION			
III	Classification of regions, delineation techniques of various types of regions, ranking of settlements; Guttman's Scalogram, Desire line diagrams, Threshold analysis: Input output analysis, SWOT analysis: Planning models (descriptive and decision making models),etc.	7	15%
IV	Methods of population forecasts and projections; Lorenz Curve , Ginni Ratio, Theil's index, ratios: urban – rural, urban concentration, metropolitan concentration; Location dimensions of population groups – social area and strategic choice approach – inter connected decision area analysis	7	15%
SECOND INTERNAL EXAMINATION			
V	Spatial standards, performance standards and benchmarks, and variable standards; URDPFI guidelines, zoning regulations/ordinances and DCR and (development control rules and regulations)	7	20%
VI	Newer approaches /Techniques in settlement planning: Land pooling ,land assembly, PRT(Plot reconstitution techniques), land readjustment, Transfer of Development Right Various approaches to urban land zoning (mixed zone, floating zone, white zoning etc. TOD(Transit Oriented Development),New Urbanism and PIU (Principles of Intelligent Urbanism),Public participation in planning process	7	20%
END SEMESTER EXAM			

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Course code	Course Name	L-T-S-Credits	Year of Introduction
PL6104	PLANNING STUDIO -I	0-0-12-6	2016
<p>Course Objectives</p> <ul style="list-style-type: none"> To develop ability to critically analyse relevant literature and field conditions To expose students to application of planning techniques To enable students to understand reporting structure and develop communications skills in technical aspects Understand and contextualize the location of the area in relation to the city, zone and area in which the particular place is situated. 			
<p>Syllabus</p> <p>Literature review in disciplines related to planning, Site Planning and Appraisal of urban/rural areas, development of communication skills – Map preparation, Report writing and Presentation skills</p>			
<p>Expected outcome.</p> <p>Students will be able to</p> <ol style="list-style-type: none"> Critically analyse relevant literature and field conditions Apply planning techniques and prepare of plans at layout/zone/part of settlement level Develop capacity to understand complex and interrelated factors to be considered in spatial planning Develop ability in technical communication 			
<p>References:</p> <ul style="list-style-type: none"> Urban and Regional Development Plans Formulation & Implementation Guidelines (2014) Ministry of Urban Affairs & Employment, Govt. of India, New Delhi Aidan Southall (1998), The City in Time and Space, Cambridge University Press Ernest R. Alexander (1992), Approaches to Planning: Introducing Current Planning Theories, Concepts and Issues. Philadelphia: Gordon and Breach Science Publishers R. Ramachandran (1991), Urbanization and urban systems in India, Oxford University Press Peter Hall and Mark Tewdwr-Jones (2010) Urban & Regional Planning Jane Jacobs (1989) The Death and Life of Great American Cities Knopf Doubleday Publishing Group James A. LaGro, Jr. (2013) Site Analysis: Informing Context-Sensitive and Sustainable Site Planning and Design, John Wiley & Sons Anastassios Perdicoulis (2011) Building Competences for Spatial Planners: Methods and Techniques for Performing Tasks with Efficiency, Taylor & Francis 			

Course Plan			
Module	Contents	Hours	Sem Exam Marks
I	<p>Literature review - research papers, book chapters, books, journals, documents, reports, etc. Preparation of a concise report is expected.</p> <p>Minor project – Understanding rural and urban character through area (layout/zone/part of settlement) study.</p> <p>The project serves to expose the student to data collection, field work, interaction with relevant stakeholders, teamwork, critical analysis, presentation of study – verbally and illustratively, preparation of report.</p> <p>Major project - Area planning exercise (green or brown filed development) –part of a city with multiple uses, housing areas, urban rural interfaces, etc., involving interplay of complex conditions</p> <p>Building on the previous exercise, the project involves a planning approach using norms and standards to make to student understand the basic principles of settlement planning as gleaned from theoretical study undertaken during semester The process should provide opportunity for multidisciplinary approach to tackle the manifold factors to be considered in spatial planning to achieve balanced development</p>	180	100