Master in Planning (Urban and Regional Planning)

Teaching Scheme & Syllabus

Master of Planning (Urban & Regional Planning), abbreviated as M.Plan (URP), is a masters degree course in planning offered by School of Built Environment, IKGPTU Mohali Campus-II. It offers specialisation in Urban & Regional Planning.

The key objective of the course is to equip the students with adequate skills required to comprehend urban and regional issues and to analyse physical, socio-economic, cultural, political and ecological dimensions of the human settlements. The course is designed to provide necessary exposure to various planning processes, emerging trends and other related advanced technical knowhow. It intends to contribute towards the creation of professionals in the field and hence to cater to the specific needs of the industry and academics. During the course, the students will be provided with ample opportunities to interact with the subject experts, relevant organisations, etc. The course enables the students to gain real time experience through their involvement in the on going or live projects.

M.Plan (URP) is a two-year course consisting of four semesters. The course structure and syllabus is designed in coherence with the *Model Curriculum for M.Plan /M.Tech (Planning), All India Council for Technical Education, 2011.* The course structure is a combination of various subjects, which includes studios, labs, theory and tutorials. The broad course structure is as follows:

The **first semester** is an integrated semester common to all master courses of planning offered by the school. It introduces the fundamentals of various aspects of planning, such as planning techniques and theory, housing, environment, infrastructure, transportation, socio-economic perspectives and information systems for planning. The studio focuses on the area appreciation and mapping techniques.

The **second semester** focuses on urban planning and consists of the related subjects, such as city and metropolitan planning, land economics, urban governance and geo-informatics. It offers electives, out of which students are expected to select one.

The **third semester** focuses on regional planning. Subjects offered in this semester are thesis programming and research methodology, planning legislation and professional practice, planning or regions, project planning and management, and planning and politics. Besides, one elective is offered.

In the **fourth semester**, students would be required to undertake thesis. In addition, two theory subjects are offered. These include development finance, disaster preparedness and management and general competency.

Each course is divided into four sections consisting of the subject details, objective, units and suggested readings. The subject syllabus is broken into progressive sections through the units, to be taught over the semester. However, it may be noted that the syllabus covered is not exhaustive and the individual subject teacher may augment the syllabus as per his/her perception of the subject. In such cases, prior concurrence of the Head of the Department is necessary. However, the focus of teaching will revolve around by looking critically and objectively at the ‘Best Practices’ being used at the local and Global level

The syllabus is designed so as to develop strong communication, interpersonal, advocacy and analytical skills of the student. The subject faculty are encouraged to assess the students in a progressive manner throughout the semester through seminars, debates, group/individual presentations, term papers, written exams (open or closed book), take home exams, report submissions, viva voce etc.

I K Gujral Punjab Technical University
Master in Planning
Teaching Scheme & Syllabus for Ist Semester

S. No.	Code	Course Titles	Distribution of Periods per week					Credits	Marks %	Duration of Univ. Exam
			L	T	S	P	Total		Ext : Int	In Hrs.
1	UC-MURP101	Planning Studio- I	1	-	7	-	8	8	50 : 50	Univ. Viva
2	UC-MURP102	Geo informatics Systems - I	1	-	-	2	3	2	60 : 40	03
3	UC-MURP103	History of Human Settlements	2	1	0		3	3	60 : 40	03
4	UC-MURP104	Planning Techniques and Quantitative Methods	2	1	0		3	3	60 : 40	03
5	UC-MURP105	Environment Planning	2	1	0		3	3	60 : 40	03
6	UC-MURP106	Infrastructure Planning -I	2	1	0		3	3	60 : 40	03
7	UC-MURP107	Socio-Economic Planning	2	1	0		3	3	60 : 40	03
	TOTAL		**12**	**5**	**7**	**2**	**26**	**25**		

Second Semester

S. No.	Code	Course Title	Distribution of Periods per week					Credits	Marks %	Duration of Univ. Exam
			L	T	S	P	Total		Ext : Int	In Hrs.
1	UC-MURP201	Planning Studio - II	1	-	7	-	8	8	50 : 50	Univ. Viva
2	UC-MURP202	Geo informatics Systems - II	1	-	-	2	3	2	60 : 40	03
3	UC-MURP203	City and Metropolitan Planning	2	1	0		3	3	60 : 40	03
4	UC-MURP204	Land Economics	2	1	0		3	3	60 : 40	03
5	UC-MURP205	Infrastructure Planning -II	2	1	0		3	3	60 : 40	03
6	UC-MURP206	Urban and Regional Governance	2	1	0		3	3	60 : 40	03
7		**Elective - I**	2	1	0		3	3	60 : 40	03
	TOTAL		**12**	**5**	**7**	**2**	**26**	**25**		

S. No.	Elective – I (Any One)	
1	UC-MURP211	Demography and Planning
2	UC-MURP212	Urban Renewal
3	UC-MURP213	Planning of New Towns

L= Lecture Periods T=Tutorial Periods S= Studio P=Practicals/ Lab/Workshop Periods

Note: Compulsory summer professional training / internship (four weeks) after second semester

Third Semester

S. No.	Code	Course Title	Distribution of Periods per week				Credits	Marks %	Duration of Univ. Exam
			L	T	S	Total		Ext : Int	In Hrs.
1	UC-MURP301	Planning Studio - III	1	0	7	8	8	50 : 50	Univ. Viva
2	UC-MURP302	Research Methodology	2	1	0	3	3	60 : 40	03
3	UC-MURP303	Planning Legislation	2	1	0	4	3	60 : 40	03
4	UC-MURP304	Rural Planning and Development	2	1	0	4	3	60 : 40	03
5	UC-MURP305	Project Planning and Management	2	1	0	4	3	60 : 40	03
6	UC-MURP306	Regional Planning	2	1	0	4	3	60 : 40	03
7	UC-MURP307	Summer Training-I		-	-	-	-	Satisfactory/ Unsatisfactory	Univ. Viva
8		**Electives - II**	2	1	0	3	3	60 : 40	03
	TOTAL		**13**	**6**	**7**	**26**	**26**		

S. No.	Elective – II (Any One)	
1	UC-MURP311	Settlement Planning in Punjab
2	UC-MURP312	Sustainable Development Goals
3	UC-MURP313	Disaster Management

Fourth Semester

S. No.	Code	Course Title	Distribution of Periods per week				Credits	Marks %	Duration of Univ. Exam
			L	T	S	Total		Ext : Int	In Hrs.
1	UC-MURP401	Planning Thesis	2	0	16	18	18	50 : 50	Univ. Viva
2	UC-MURP402	Development Finance	2	1	0	3	3	60 : 40	03
3	UC-MURP403	Professional Practice	2	1	0	3	3	60 : 40	03
	TOTAL		**6**	**2**	**16**	**24**	**24**		

L = Lecture Periods T = Tutorial Periods S=Studio
P = Practical / Lab/Workshop Periods

Note: Credits for each subject are the same as the number of lecture /tutorial /practical hours per week, whichever is higher.

I K Gujral Punjab Technical University
Master in Planning (1st Semester)

Course Code	Course Name	L/S, T, P	Credits	Marks %	Duration of Univ. Exam
				Ext : Int	In Hrs.
UC-MURP101	***Planning Studio -I***	**1L; 7S**	**8**	**50 : 50**	**Univ. Viva**

Course Objective

- To enable the students to understand the socio-economic and political context along with the land-use dynamics of the study area in relation to the city. The focus of this studio will be to develop the students' skills in area appreciation and mapping techniques.

Literature Review and Area Appreciation at the sub-city level:

Search and review of relevant literatures, Book review, review of articles and paper, etc.

Understanding the linkages between different aspects of socio-economic life in relation to the land-use in the cities. Preparation of area profiles in the city, such as residential, commercial, recreational, industrial, slum area and institutional area. Studying impact of landuse, economic and socio-cultural activities on the physical environment of the area.

Neighbourhood Planning:

Preparation of neighbourhood plan considering different user groups. This may also involve the preparation of residential / site plans preferably for areas where new developments are coming up. Students need to understand the need for a balanced development with incorporation of elements like sustainability, livelihood, environmental protection, inclusive growth and institutional engagement.

Criteria for Exam/ Question Paper Setting:- The evaluation is to be done through Viva - voce conducted at the institute level by Internal / External jury members appointed in consultation with the university from the approved panel list of examiners.

I K Gujral Punjab Technical University
Master in Planning (1st Semester)

Course Code	Course Name	L/S, T, P	Credits	Marks %	Duration of Univ. Exam
				Ext : Int	In Hrs.
UC-MURP102	Geo informatics Systems - I	1L; 2P	2	60 : 40	03

Course Objective

- To introduce the information systems and develop basic computing skills relevant to planning

Unit 1: Information System Concepts and Components

Definition of Information Systems; functions of an information system; components, hierarchy, types, flows, loops; introduction to DBMS

Unit II: Information Systems for Planning

Systems approach to planning, use of information systems for planning, CAD, GIS, Remote Sensing, City Engine and other relevant software's.

Unit III: Data Sources

National Urban Information System (NUIS), National Spatial Data Infrastructure, Natural Resources Data Management System, Bio-diversity information System; Indian Bio resource information Network, Water Resource Information System (WRIS), Environmental Information System; Bhuvan; National Remote Sensing Centre; Indian Space Research Organization; Census of India, National Sample Survey Organisation (NSSO), Directorate of Economics and Statistics, University Consortium for Geographic Information System (UCGIS); standardization of software, Open Geospatial Consortium(OGC) , GIS libraries; GDAL/OGR, Central Statistical Office (CSO), Archaeological Survey of India (ASI), National Family Health Survey (NFHS), Pollution Control Boards, Meteorology.

Unit IV: Information and Communications Technologies

Introduction to computer hardware and software. Communications technologies and Networks; Servers and its types; data storage systems, files and databases; Operating software; applications packages and user written programs; Open source and proprietary GIS software; Web GIS and Location Based Services.

Unit V: Future Information Systems

Cloud computing; Characteristics and Components; 3D visualization; Big Data Management; Online Analytical Processing; Data Warehousing and Data Mining; Data Sharing and Security.

Criteria for Exam Question Paper Setting:-

Total ten questions are to be set two from each unit & students are required to attempt total five questions i.e. one from each unit.

CORE REFERENCES:

- Richard Groot and John Mc Laughlin, Geospatial Data Infrastructure Concepts, Cases and Good practice, Oxford University Press, Oxford.
- NSDI Metadata standard-NNRMS Secretariat Department of Space, India
- J.K.Berry (1996), Beyond Mapping; concepts, algorithms, and issues in GIS, Wiley Publications
- Laudon, K., & Laudon, J. (2014). Management information systems. (13 ed.,) Saddle River: Prentic Hall publications, New Jersey.

I K Gujral Punjab Technical University
Master in Planning (1st Semester)

Course Code	Course Name	L/S, T, P	Credits	Marks %	Duration of Univ. Exam
				Ext : Int	In Hrs.
UC-MURP103	***History of Human Settlements***	**L-2; T-1**	**3**	**60 : 40**	**03**

Course Objective

- To equip the students with the required knowledge of conventional and contemporary planning thought, pluralistic nature of values in the profession, planning approaches and models. And to focus on integrating procedural and substantive elements of planning theory to current and future planning practices.

Unit 1: Planning Concepts

Settlement systems, Classification of settlements, primate city, central place concept, concepts of complementary area, central goods and services, range, threshold etc; city-region relationship; structure of city regions, area of influence, dominance; rural-urban fringes; push and pull factors; migration; need for planning;; Scalar arrangements in Planning (regional, mega, metro regions, city and local Area Plans).

Unit II: Rational Planning Approaches and Models

Systems approach to planning; Comprehensive development plan; Pluralism in planning; Strategic planning; Structure plans; Incremental planning; Equity based planning; Inclusive planning; Feminist planning theory. Participatory planning – Collaborative and communicative planning; local area plans, phasing of plan, integration with five year plans, annual plan, etc. Models - Gravity model; Intervening opportunity models; Political economy model; New economic geography models & globalisation models.

Unit III: Methods and Tools

Analytical methods - linear programming, threshold analysis, simulation, rank size rule, scalogram, sociogram, cluster and factor analysis, delineation techniques, SWOT analysis; demographic analysis; location models, gravity models.

Unit IV: Emerging and Future Trends

Emerging school of thoughts and doctrines; Recent and contemporary contributions to the changing planning paradigms; Planning for future and in future - vision development, strategizing, Implementation of planning policies and development plans.

Criteria for Exam Question Paper Setting:-

Total eight questions are to be set two from each unit & students are required to attempt total five questions i.e. one from each unit.

CORE REFERENCES:

- Baker, M. (2001), Some Reflections on Strategic Planning Processes in Three Urban Regions. Planning Theory and Practice, 2, (2), pp. 230-235.
- Faludi. A (1973), Planning Theory; Pregamon Press, Oxford, England, U.K.
- Friedman, J (2005), The World is flat: A Brief history of 21st century; Farrar, Straus and Giroux publishers.
- Lane, M. B. (2005), Public Participation in Planning: An Intellectual History, Australian Geographer, 36(3), 283-299

I K Gujral Punjab Technical University
Master in Planning (1st Semester)

Course Code	Course Name	L/S, T, P	Credits	Marks %	Duration of Univ. Exam
				Ext : Int	In Hrs.
UC-MURP104	*Planning Techniques and Quantitative Methods*	L-2; T-1	3	60 : 40	03

Course Objective

- To acquire proficiency in statistical techniques and able to conduct empirical studies employing statistical software

Unit I: Techniques of Plan Preparation

Surveys, Techniques of conducting surveys for land use, building use, density, structural condition of buildings, heights of building, land utilization and physical features of land; Techniques of mapping – methodologies, physical surveys, land use classification, base map preparation for various levels of plans. Data requirement for various types of plans; Planning standards and regulations – Spatial standards, performance standards and standards for utilities, URDPFI guidelines, development control regulations.

Unit II: Introduction to Statistical Methods

Statistical data - Types of data: nominal, ordinal, interval and ratio; Discrete versus continuous data; Numerical data – properties and measures; Standard notation; Data collection, coding and decoding, methods, tabulation and graphic presentation of data; Frequency distribution; Measures of central tendency- mean, median, mode; Measures of dispersion – range, variance, standard deviation, skewed distribution, kurtosis; Introduction to spread sheets and statistical software.

Unit III: Probability, Sampling distributions and Testing of Hypothesis

Introduction to probability; discrete random variables and probability distribution; Sampling distributions–T and F distribution; Tests of hypothesis; type I & II errors; one-tailed and two tailed tests; chi-square test, Student T test.

Unit IV: Correlation and Regression

Correlation – scatter plot diagrams, correlation coefficients, simple correlation; partial correlation; Least square method; Assumptions of regression analysis; Linear regression, Multiple regressions; Dummy variables; Functional forms; Binary dependent variables; Instrument variables; Time series analysis.

Unit V: Application of vital statistics in Spatial Planning.

Elementary association models and decision making; Index Numbers, Weighted and unweighted index numbers; Application of index number in spatial planning; Demographic projection, calculation techniques of vital events. Methods of demography and population studies – population projections, introduction to Census data and sample surveys.

Evaluation Criteria for Exam Question Paper Setting:-Total ten questions are to be set two from each unit & students are required to attempt total five questions i.e. one from each unit.

CORE REFERENCES:

- Alan C. A Cock, A Gentle Introduction to STATA, Revised Third Edition
- Agarwal BL (2007), *Programmed Statistics*, New Age International Publishers, New Delhi
- Wooldridge, Introductory Econometrics: A Modern Approach, Thomson
- Gupta and Gupta: Business Statistics, Sultan Chand and Sons
- Giri and Banerjee: Introduction to Statistics, Academic Publishers

I K Gujral Punjab Technical University
Master in Planning (1st Semester)

Course Code	Course Name	L/S, T, P	Credits	Marks %	Duration of Univ. Exam
				Ext : Int	In Hrs.
UC-MURP105	*Environmental Planning*	L-2; T-1	3	60 : 40	03

Course Objective

- To give insights on global and local issues of environmental concern and introduce fundamental concepts and policies related to housing.

Unit I: Components of Nature and Ecology

Meaning and components of nature; Basic concepts of ecology, process of flow of material, water, energy, invasion, succession, perdition, regulatory forces, adaptation, tropic levels, food chains, food web, ecological pyramids; Ecology and their relevance to planning; Modifications in natural environment, causes and consequences.

Unit II: Global & Local Concerns for Environment

Evolution of human settlements; civilizations and impact on environment; Contemporary environmental discourse; Green Agenda and Brown Agenda; Global environmental movement; Environment and poverty; environmental management and environmental planning; global warming, climate change; biological diversity; Brunt land's Commission's Report; Agenda 21; Club of Rome Report – Introduction; UNEP charters – introduction.

Unit III: Environmental resources: Consumption, Conservation and Recycling

Environmental resources and ecosystem services; Concepts of natural reserves; Consumption, Conservation and recycling of resources; India's environmental programmes; Government of India's policies relating to forest, wildlife, hill, water resources, wastelands, hills, coastlines, oceans etc.

Unit IV: Housing and Built Environment

Significance of housing in National Development goals; housing as a basic entitlement; core issues of housing; Understanding of factors affecting residential location, theoretical knowledge of ecological, neo-classical, institutional approach to housing; Existing housing statistics at rural and urban level; estimating housing shortage, housing need, current methods of demand assessment; Typologies of housing; Housing Norms, Densities and Standards; urban sprawl and environmental damages.

Unit V: Housing Sectors, Acts and Policies

Affordable Housing; Housing for the low income groups – slums and squatter settlements; investment in housing in public and private sectors; Cooperative housing, objectives and principles; management and financing of housing projects; Acts, Policies and Programmes; Comparative policy analysis.

Evaluation Criteria for Exam Question Paper Setting:-Total ten questions are to be set two from each unit & students are required to attempt total five questions i.e. one from each unit.

CORE REFERENCES:

- Charles Correa (2000). Housing and Urbanisation. Thames and Hudson
- Glenn H. B. (1966). Housing and Society. The Macmillan Company, New York.
- Pachauri, R. K (1999), Looking Back to Think Ahead, TERI, New Delhi.
- Centre for Science & Environment (2006), State of India's Environment – A Citizen Report, CSE, New Delhi.

I K Gujral Punjab Technical University
Master in Planning (1st Semester)

Course Code	Course Name	L/S, T, P	Credits	Marks %	Duration of Univ. Exam
				Ext : Int	In Hrs.
UC-MURP106	*Infrastructure Planning-I*	L-2; T-1	3	60 : 40	03

Course Objective

- To provide exposure to infrastructure and its sub-sectors relevant to physical planner in planning and design of urban and regional Infrastructure

Unit I: Introduction to Infrastructure Planning

Importance of infrastructure, Objectives of the utilities, services planning and implications on public health and environment; Economic, Introduction to policies and programmes in infrastructure planning; Issues and concerns of maintaining the utilities and services, need and importance of service level benchmarks of water supply, sanitation, sewerage, solid waste and transportation.

Unit II: Physical Infrastructure

Role of physical planner in planning of utilities and services; water supply distribution system; storm water drainage system; sewerage system; solid waste management, electricity distribution system.

Unit III: Social Infrastructure

Types of social infrastructure; Health care - essential service, availability, access and utilisation, standards, public and private institutions, policies, National Rural Healthcare Mission, hierarchy of health care establishments; Education - primary and secondary educational institutions, standards, policies, right to education (RTE); Public and community spaces – recreational, safety and security.

Unit IV: Transportation

Introduction to transport and travel; Understanding travel from the mobility, economic, social-psychologist, time/space perspective; Transportation planning process; Introduction to four stage modelling; Land use and transportation integration; Demand and supply of transport; Congestion pricing, transit orient development; Transport Pricing, Basic transport economic model.

Unit V: Emerging and Future Infrastructure

Spatial data as infrastructure; Impact of technology on infrastructure; other concepts, components and frameworks.

Evaluation Criteria for Exam Question Paper Setting:-Total ten questions are to be set two from each unit & students are required to attempt total five questions i.e. one from each unit.

CORE REFERENCES:

- Dinesh M, Omer T, Michael S, Michael J, University of Michigan, transport research institute, (2009), Road safety in India: challenges and opportunities. (http://tripp.iitd.ernet.in/DM_UMTRI-2009-1[1].o.pdf)
- Jaun de Dios Ortuzar, Luis G.Willumsen, Wiley, (2011), Modelling Transport (4th Edition) – Chapter 4: trip generation modelling, chapter 5: trip distribution modelling, chapter 6: modal split and direct demand modelling, chapter 7: discrete choice modelling, chapter 10: assignment, chapter 16: pricing and revenue.
- Jean-Paul Rorigue, Claue Comtois, Brian Slack, Routledge Taylor & Francis group, (2006), The geography of transport systems.
- Ministry of Urban Development, Govt. of India, (2010), Service level benchmarks for urban transport (http://urbanindia.nic.in/programme/ut/Service_level.pdf)

I K Gujral Punjab Technical University
Master in Planning (1st Semester)

Course Code	Course Name	L/S, T, P	Credits	Marks %	Duration of Univ. Exam
				Ext : Int	In Hrs.
UC-MURP107	Socio-Economic Planning	L-2; T-1	3	60 : 40	03

Course Objective

- To provide exposure to concepts, theory and issues relating to socio-economic aspects towards planning of settlements. Also provide understanding of the society and the economy of the nation and its importance in spatial planning

Unit I: Introduction to Sociology

Definition and scope of sociology; Concepts of sociology-society, social systems, social structure, institution and organization; Concept of space and people (Lefebvre, Soja and Harvey); Sociology and Planning.

Unit II: Social Groups, Social Issues, Rural and Urban Sociology

Contemporary sociological theories- key works of Saskia Sassen, Antonio Gramsci, Loytard, Jane Jacobs; Social structure and social change; stratification and social inequality; Introduction to agrarian, industrial and modern society and spatial formation. Linking social structure and physical structure of village and urban settlements; marginality, vulnerability, social inclusion and exclusion; inequality and equity

Unit III: Applied Economics – Goods and Services

Definition of economics; terms used in economics related to urban and regional planning (URP); central problems of economics; Basics of micro and macroeconomics; use of economics in planning; Definition of need, demand, and supply; Law of demand and supply, types of demand; theory of demand and utility; Elasticity of demand and supply, its use in planning; Typed of economics and their application in URP.

Unit IV: Land Economics

Economic concepts of land, objectives and scope of land economics; Relevance for spatial planning; economic principles of land uses; Economic rent, land use and land values, market mechanism and land use pattern.

Unit V: Economics of Location and Planning.

Analysis of location of specific uses like residential, industrial, commercial and institutional in the light of location theories in intra-regional and inter-regional context; Techniques of cost benefit analysis of urban development programme.

Evaluation Criteria for Exam Question Paper Setting:-Total ten questions are to be set two from each unit & students are required to attempt total five questions i.e. one from each unit.

CORE REFERENCES:

- Benjamin S: Occupancy Urbanism: Radicalizing Politics and Economy beyond Policy and Programs, International Journal of Urban and Regional Research, Vol. 32.3, September, 719-729, 2008
- Brenner N and Theodor N: Cities and Geographies of "Actually Existing Neoliberalism", Antipode, Volume 34, Issue 3, 349-379, 2002
- De Souza M: Which Right to Which City? In Defence of Political- Strategic Clarity, Interface, Vol 2(1), May, 315-333, 2010
- Kumar A and Ray R: Decentralized Planning in India-A Myth or a Reality?, Development Alternatives Newsletter, August, 2012

I. K. Gujral Punjab Technical University Jalandhar, Kapurthala

Master of Planning Teaching Scheme 2019

Fourth Semester

Course Type	S. no	Course Code	Course Title	Load Allocations					Marks %	Credits	Duration of Univ. Exam/ Viva-Voce
				L	Sem/ Tut	P/F W	Stu	Total	Int : Ext		
PC	1	UC/MURP-401/19	Planning Thesis	2	-	-	10	**12**	**60:40**	**19**	External Viva Voce
OE	2	UC/MURP/OE-402 (A) – 402 (E)/19	Open Elective – II (MOOC/SWAYAM/NPTEL/ Open learning course relevant to M.Plan course – 3 credits, with prior approval of HOD- Architecture and Planning or can be run at department level)	2	2	-	-	**3**	-	**3**	Certificate to be submitted at the end of the semester/assessment by department.
			Total	4	1	-	10	**15**		**22**	

Note: The selection of MOOCs should be related to the subject substituted as far as possible. The prior approval of the HoD/ Institute is mandatory. The PTU guidelines dated will be followed.

S.No	Open Elective- (Choose any one from the given choices)		MOOC	
1	UC/MURP - OE-402 (A)	Introduction to Philosophical Thoughts	UC/MURP - MOOC-313-16/19 (related to planning)	MOOC-I
2	UC/MURP - OE-402 (B)	ICT for Development	UC/MURP - MOOC- 317-20/19 (related to R.M)	MOOC-II
3	UC/MURP - OE-402 (C)	Soft Skills and Interpersonal Communication	UC/MURP - MOOC -321-24/19 (related to allied planning)	MOOC-III
4	UC/MURP - OE-402 (D)	Introduction to Art and Aesthetic	UC/MURP - MOOC -325-28/19 (related to Legal Services/ Administration/ Personal Development /Health & Happiness / Miscellaneous etc	MOOC-IV
5	UC/MURP - OE-402 (E)	Health and Happiness, well being		

IK Gujral Punjab Technical University

Master in Planning (M. Plan 4th semester)

Course Code	Course Name	L/S, T, P	Credits	Exam Duration
UC/MURP - 401/19	*Planning Thesis*	**2 L; 10 S**	**12**	**External/Internal Viva voce only**

Course Objective

To undertake independent study in the field of Planning . The main objectives of preparing a thesis is to provide an opportunity to each student to undertake a study/research to explore in depth and to develop a subject of his/her own choice demonstrating the ability to use effectively the tools of independent investigation and judgment.

Course Outcomes: At the end of the course, the students will be able to –

1. To have a basic understanding of the area chosen for study (by carrying out a detailed literature review).
2. To undertake detailed exploration of the topic (by way of surveys and studies).
3. To identify issues and concerns those emerge out of the study and suggest recommendations.

Detailed Syllabus:

The students are required to carry out independent research and prepare a thesis on a topic on planning selected by them and approved by the department under the supervision of a research guide allocated by the department. The theme of the thesis should offer scope to adopt a fresh approach in formulating a concept of developing a methodology, effective and useful in the realm of planning fields/concerns/areas. Each student shall prepare thesis on a selected topic under the supervision of a guide.

Both thesis topic and guide shall be approved by dept. The thesis shall forthright be presented in the External/Internal Viva-voce examination, in the form of a report well illustrated by maps, drawings, charts, sketches, photographs, etc. The external viva voce examination should be through the external examiners i.e. outside faulty and a student can appear in external examination only when student clears/passes the internal departmental viva voce.

List of Exercises / Practical:

- Field visit to Collect Data on selected Topic of Research.

List of Assignments/Tests:

- Marked Reviews at different Stages of completion of Research work.
- Internal and External Jury.

Evaluation Criteria: -

Students coming up with the publication of the papers during the course shall be considered for additional weighted out of the 10% marks result as a part of the final report.

The evaluation is to be done through Viva - voce conducted at the institute level by Internal / External jury members appointed in consultation with the university from the approved panel list of examiners.