

**University of Management and Technology**  
**Department of City and Regional Planning**

**Core Courses Outline**  
**MSc. City and Regional Planning**

**Course Code: CRP-601**

**Course Title: Planning Theory**

Program	MS City and Regional Planning
Credit Hours	2+0
Duration	16 Weeks
Prerequisites	None
Resource Person	Minahil Nawaz
Counseling Timing (Room#        )	
Contact	minahil.nawaz@umt.edu.pk

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**Date.....**

### **Learning Objective:**

After studying this course, the learners will be able to:

1. Understand the theoretical aspect of policies and planning
2. Explore how the planning theories can be applied for spatial development plan making
3. Build planning model to test the economic and regional growth for the identification of suitable location for industries, human settlement including new towns, agriculture and alike.

### **Learning Methodology:**

1. Lecturing
2. Demonstration

### **Grade Evaluation Criteria**

Following is the criteria for the distribution of marks to evaluate final grade in a semester.

<b>Marks Evaluation percentage</b>	<b>Marks in</b>
Quizzes	10
Assignments	3
Mid Term	30
Attendance & Class Participation	2
Presentations	5
Final exam	50
Total	

## **Reference Books:**

Hall, P., and Tewdwr-Jones, M. (2011), Urban and Regional Planning, Routledge.

1. Greed, C. (ed.) (1999), Social Town Planning, Routledge.
2. John Glasson (1987), An introduction to regional planning; Concepts, theory and practice. Latest edition.
3. Andreas Faludi (1986) A reader in Planning theory, Edited/ reprint, Pergamon Press, Oxford, London.
4. Ratcliff, John (1981), Introduction to Town and Country Planning, London, Hutchinson.
5. Christopher Pollitt, Lew Lewis, Josephine (1979) Public Policy In Theory And Practice: A Reader, Hodder & Stoughton, Open University Press.
6. Journal of RTPI. American Journal of Planner.

## **Calendar of Course contents to be covered during semester**

<b>Week</b>	<b>Course Contents</b>
1	Theory of Planning: Evolution of planning theory, ends and means in Planning

2	Choice theory of Planning
3	Comprehensive planning: Goal and process, advantage and disadvantage
4	Incremental planning
5	Mixed scanning- a science of muddling through
6	Advocacy and pluralism
7	Community participation and decision behavior; social planning and public participation

8	MID TERM WEEK
9	Theories in Planning: economic growth models I
10	Theories in Planning: economic growth models II
11	Theories in Planning: economic growth models III
12	Theories in Planning: Regional Growth I

13	Theories in Planning: Regional Growth II
14	Theories in Planning: Regional Growth III
15	REVISION
16	END TERM

**Course Code: CRP-602**

**Course Title: Comparative Urban Planning**

Program	MS City and Regional Planning
Credit Hours	3 (2+1)
Duration	16 weeks
Prerequisites	None
Resource Person	Rummana Khan Sherwani
Counseling Timing (Room#        )	
Contact	0302831009

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**Learning Objective:**

Students who successfully complete this course should be able to:

This course is designed to provide students with understanding to the problems, assumptions, approaches and institutional settings of urban planning in developed and developing countries, besides, the analysis of various existing and previous planning models used around the world.

**Learning Methodology:**

- Lecturing
- Written/reading/practical Assignments
- Guest Speaker/Seminar/Field visits
- Case Studies

**Grade Evaluation Criteria**

Following is the criteria for the distribution of marks to evaluate final grade in a semester.

<b>Marks Evaluation</b>	<b>Marks in percentage</b>
Quizzes	5
Assignments	15
Mid Term	20
Attendance & Class Participation	5
Term Project & Presentation	25
Final exam	30
Total	100

## **Course Contents:**

- Introduction
- Socio-economic contexts of urban planning in the capitalist, socialist and the developing countries.
- Introduction to the problems, assumptions, approaches and institutional settings of urban planning in developed countries like the United States, Britain, France, China, Poland etc., and in developing countries like India, Pakistan, and China etc.
- Concepts and approaches emerging from the United Nations and the World Bank's involvement in urban problems of this world.
- Students will be expected to appreciate varying national styles of urban planning and encouraged to critically understand the context of each approach for assessing its relevance to the Pakistani conditions.

## **Reference books (Authors, title, publisher & publication year):**

- Cherry G.E., 1988, "Cities and Plans", Edward Arnold London.
- Cullingworth J.B., 1988. "Town and Country Planning in Britain" Tenth Edition. Unwin Hymen, London.
- Masser & R. Williams (eds), 1986, "Learning from other countries: the cross-national dimension in urban policy making", Alden Press, Oxford,
- Stretton H., 1978, "Urban Planning in Rich and Poor Countries", Oxford University Press, Oxford PP, 3-18 and 78-79 (the rest of the book is worth rereading, thou),
- Cherry G.E., 1988, "Cities and Plans", Edward Arnold London.
- Cullingworth J.B., 1988. "Town and Country Planning in Britain" Tenth Edition. Unwin Hymen, London.
- Hall P., 1988, "Cities of Tomorrow". Blackwell, Oxford. - M.Grant, 1992, "Planning law and the British land use planning system: an overview", Town Planning Review, 63 (1).
- Robson B., 1988, "Those Inner Cities: Reconciling the social and economic aims of urban policy".
- Dal Cin A. and D. Lyddon (eds), 1989, International Manual of Planning
- Practice", International Society of City and Regional Planners, The Hague.

- Davies HWE, 1991, "Zoning and discretionary control: a Comparison" unpublished paper to 1991. AESOP/ACSP Congress, Oxford.
- Cherry G.E., 1986, Problems of cross national research: An East European perspective" in I. Masser & Williams, "Learning from other countries".

We will also read a number of articles that are available through online resources.\*

## Term Paper Discussion relevant to the Subjects

<b>Week</b>	<b>Course Contents</b>
<b>1.</b>	<b>Introduction to Comparative Urban Research:</b>
<b>2.</b>	<b>Comparative Urban Research:</b> <b>The Cross-National Dimension</b>
<b>3.</b>	<b>Comparative History And Theories of Urban Planning</b>
<b>4.</b>	<b>Socialism, Capitalism and Developing Countries</b>
<b>5.</b>	<b>Policy implementation and evaluation (I)</b> Knowledge and skills in the design and conduct of studies evaluating public and private policies and programs. Emphasis on variety of contexts of plan/program implementation and research design issues associated with those contexts.
<b>6.</b>	<b>Comparing Urban Planning Systems of Pakistan: A Legal and Institutional Viewpoint</b>
<b>7.</b>	<b>Challenges in Developing and Developed Countries:</b> <b>Urbanization and Urban Growth</b> Urban Growth Management Best Practices: Towards Implications for the Developing World
<b>8.</b>	<b>Challenges in Developing and Developed Countries:</b> <b>Urbanization and Urban Growth</b> <b>Causes and Consequences of Urban Growth and Sprawl</b>
<b>9.</b>	Mid term
<b>10.</b>	<b>Comparative Urban Governance: An Integrated Approach</b>

<b>11.</b>	<b>Urban Governance: An Asian Perspective</b> an integrated framework for comparing urban governance cross nationally. Joining together structural, cultural, and rational actor approaches to cross-national comparison
<b>12.</b>	<b>URBAN RENEWAL:</b> <i>Regeneration, Conservation and Redevelopment</i>  Why is Gentrification a Problem?
<b>13.</b>	<b>Inequalities and Disparities: A World's Perspective</b> Social Impact Assessment (SIA) looks at the social effects of a policy, program, or project while it is still in the planning stages. SIA is anticipatory research and social forecasting, estimates and appraises the condition of society as organized and changed by major development projects; alerts decision-makers to the significant factors in the social environment affected by a proposed policy, and involves affected parties in the definition of social impacts.
<b>14.</b>	<b>Case Studies on Disparities in Punjab, Pakistan</b> Examine theories and practices of multisector collaboration (public, private, nonprofit). The use of collaboration as an alternative way of solving public problems.
<b>15.</b>	<b>Measuring Gaps and Differences</b>  <b>Economic Characteristics of Poverty Groups</b> Rural poverty Women and poverty Ethnic minorities, indigenous populations, and poverty

Practical involving group of two students engaging in a planning process. Emphasis on dealing with an immediate set of planning issues. Group determines in consultation with resource person

(1) bounds of the problem(s);

- (2) resources available;
- (3) how the resources will be allocated;
- (4) what impact the group will seek to have;
- (5) services to be delivered or products to be produced (Plan/Policy/Guideline etc.); and
- (6) how it will work as a team to achieve its objectives.

Topic shall vary for each group. The group is involved in implementing, evaluating and reshaping its own plan of operation. Some groups might choose to produce widely-disseminated, published reports, often for specific clients(hypothetical); others, especially those serving community groups, may choose to produce analyses, draft testimony, surveys and guides.

**Course Code: CRP-603**

**Course Title: Regional Development Planning**

Program	MS City and Regional Planning
Credit Hours	3+0
Duration	16 Weeks
Prerequisites	None
Resource Person	Dr. Hamid Arshad
Counseling Timing (Faculty office)	Course day, 4 to 6 pm
Contact	Hamid.arshad@umt.edu.pk

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### **Learning Objective:**

The course will provide study of regions and processes of regional change. It will also provide understanding of tools, methods and theories of regional analysis, from concepts and techniques of component disciplines such as economics; geography; government; sociology; engineering; agriculture; regional and town planning; and environmental science.

Graduates will possess a theoretical and applied knowledge of regional, political and planning issues, allowing work in central government, regional organizations and private consultancies or as a prelude to higher degree studies

### **Learning Methodology:**

1. Lecturing
2. Demonstration

### **Grade Evaluation Criteria**

Following is the criteria for the distribution of marks to evaluate final grade in a semester.

<b>Marks Evaluation percentage</b>	<b>Marks in</b>
Quizzes	10
Assignments	3
Mid Term	30
Attendance & Class Participation	2
Presentations	5
Final exam	50
Total	100



### **Reference Books:**

1. Jonathan Barnett, Planning for a New Century: The Regional Agenda, ISBN 1-55963-806-0  
Peter Calthorpe & William Fulton, The Regional City: Planning for the End of Sprawl, ISBN 1-55963-784-6
2. Patricia E. Salkin, Supersizing Small Town America: Using Regionalism to Right-Size Big Box Retail, 6 Vermont Journal of Environmental Law 9 (2005)
3. Sameer Kochhar, Deepak B Phatak, H Krishnamurthy, Gursharan Dhanjal, eds., Infrastructure & Governance, Academic Foundation, New Delhi, 2008
4. Sameer Kochhar & M Ramachandran Building from Bottom Infrastructure and Poverty Alleviation
5. James Parkin & Deepak Sharma Infrastructure Planning

### **Calendar of Course contents to be covered during semester**

Week	Course Contents
1	Introduction to regional planning: Concepts, need and objectives Formal, functional and planning regions, methods for the delineation of regions and districts as planning region.
2	Inter and intra-regional inequalities; Regional disparity and depressed regions: Balanced versus imbalanced development within national space.

3	National and regional Economic Scenario. Analysis of social and physical infrastructure systems
4	Environmental and energy impacts of regional infrastructure development; centralized vs. decentralized systems
5	Regional development theories, spatial flows, rural-urban linkages, growth poles and regional growth.
6	Rural urban linkages
7	Community participation and decision behavior; social planning and public participation
8	MID TERM WEEK

9	Rural development as an instrument of regional policy.
10	Regional planning system of other countries
11	Sustainable regional development.
12	Theories in Planning: Regional Growth I
13	Regional planning in Pakistan
14	Theories in Planning: Regional Growth II

15	REVISION
16	END TERM

**Course Code: 604**

**Course Title: Advanced Research Methods**

Program	MSc. City and regional planning-
Credit Hours	3 (2+1)
Duration	16 weeks
Prerequisites	None
Resource Person	Dr. Fariha Tariq
Counseling Timing (Room#        )	
Contact	

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**Learning Objective:**

1. Understand the process, basic elements and methodology of research
2. Understand the knowledge of research methods and its application in the field of planning
3. Demonstrate ability to design research proposal
4. Demonstrate ability to apply appropriate research techniques and methods
5. Demonstrate ability to analyze and interpret the data
6. Demonstrate ability to synthesize and compile the research findings in report format

**Learning Methodology:**

- Lecturing
- Written Assignments
- Guest Speaker
- Case Studies

**Grade Evaluation Criteria**

Following is the criteria for the distribution of marks to evaluate final grade in a semester.

<b>Marks Evaluation percentage</b>	<b>Marks in</b>
Quizzes	5
Assignments	10
Mid Term	20
Attendance & Class Participation	5
Term Project	10

Presentations	10
Final exam	40
Total	100

### **Recommended Text Books:**

1. Berg, B. L. (2003), *Qualitative Research Methods for the Social Sciences*, Allyn & Bacon.
2. Nardi, P. M. (2002), *Doing Survey Research: A Guide to Quantitative Research Methods*, Allyn & Bacon.
3. Neuman, W. C. (2002), *Social Research Methods: Qualitative and Quantitative Approaches*, Allyn and Bacon.
4. Karl. E. Weber, Indra. P. Tiwari, *An Introduction: Research and Survey Format Design, Division of Human Settlements Development*, Bangkok, Asian Institute of Technology, (Latest Edition).
5. M. Iqbal Chaudary, *Social Theory, Research Problems*, Lahore, Aziz Book Depot, (Latest Edition).

### **Reference Books:**

1. Yin, Robert K (2016), *Qualitative Research*, Guilford press.
2. Wang, X., Hafe, R. (2007), *Research Methods in Urban and Regional Planning*, Springer.
3. Patten, M. L. (2005), *Understanding Research Methods: An Overview of the Essentials*, Pyrczak Pub.

### **Calendar of Course contents to be covered during semester**

<b>Week</b>	<b>Course Contents</b>	<b>Reference Chapter(s)</b>
1	<ul style="list-style-type: none"> <li>• What Is Research?</li> </ul>	
2	<ul style="list-style-type: none"> <li>• Definition Of Research</li> <li>• Assignment : Write Your Research Interest Area With 3-4 References-2 Pages</li> </ul>	
3	<ul style="list-style-type: none"> <li>• Process Of Research</li> </ul>	
4	<ul style="list-style-type: none"> <li>• Types Of Research</li> <li>• Difference between Qualitative And Quantitative Research</li> </ul>	
5	<ul style="list-style-type: none"> <li>• Literature Review</li> <li>• How to read article</li> <li>• Endnote software</li> <li>• Poster: Archival Research</li> </ul>	
6	<ul style="list-style-type: none"> <li>• Conceptual Framework</li> </ul>	
7	<ul style="list-style-type: none"> <li>• Research Questions</li> </ul>	
8	<ul style="list-style-type: none"> <li>• Research Design</li> </ul>	
9	<ul style="list-style-type: none"> <li>• Mid term</li> </ul>	
10	<ul style="list-style-type: none"> <li>• Data Collection Methods</li> <li>• Mental Mapping</li> <li>• Looking and Listening Survey</li> <li>• Behavior Mapping</li> </ul>	
11	<ul style="list-style-type: none"> <li>• Focus group discussions</li> </ul>	
12	<ul style="list-style-type: none"> <li>• Questionnaire</li> </ul>	



13	<ul style="list-style-type: none"> <li>• Sampling</li> </ul>	
14	<ul style="list-style-type: none"> <li>• Writing a Research Proposal</li> </ul>	
15	<ul style="list-style-type: none"> <li>• Pilot Study</li> </ul>	
16	<ul style="list-style-type: none"> <li>• Presentations</li> </ul>	

**Course Code: CRP-605**  
**Course Title: Advanced Planning Techniques**

Program	MS City and Regional Planning
Credit Hours	3 (2+1)
Duration	16 weeks
Prerequisites	None
Resource Person	Zaira Tahir
Counseling Timing (Room#        )	
Contact	0333-4041564

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### **Learning Objective:**

Students who successfully complete this course should be able to:

- This course develops advanced skills in selecting, critiquing and applying appropriate qualitative and quantitative methods to issues in planning practice.
- Covers key contemporary public policy issues and themes from the perspective of values, explanations of the real world, policy alternatives and implementation.
- Critical analysis of approaches to social policies, particularly as they affect issues of planning & development.
- Demonstrate an advanced understanding of the importance of policy, plan and programme analysis and evaluation.
- Select and apply appropriate tools for analysis and evaluation in different contexts.
- Demonstrate an advanced level of creative and critical thinking about planning policy and evaluative practice.
- Prepare analytical findings and policy recommendations for presentation to various audiences in a professional manner.

### **Learning Methodology:**

- Lecturing
- Written/reading/practical Assignments
- Guest Speaker/Seminar/Field visits
- Case Studies

### **Grade Evaluation Criteria**

Following is the criteria for the distribution of marks to evaluate final grade in a semester.

<b>Marks Evaluation</b>	<b>Marks in percentage</b>
Quizzes	5
Assignments	15
Mid Term	20
Attendance & Class Participation	5
Term Project & Presentation	25
Final exam	30
Total	100

**Recommended Text Books:**

Contemporary Urban Planning. 8th edition. By John M. Levy, Upper Saddle River, NJ: Prentice Hall, Inc. 2009. ISBN-13: 978-0-13-602545-0.

There are no other specific set texts for this course.

We will also read a number of articles that are available through online resources.\*

**Calendar of Course contents to be covered during semester**

<b>Week</b>	<b>Course Contents</b>
<b>1.</b>	Introduction to Advance Planning Techniques
<b>2.</b>	Planning as a cyclic process. Techniques of policy making and strategy planning.
<b>3.</b>	Introduction to decision theory as a basis of public policy planning.
<b>4.</b>	Policy analysis as a technique of planning. Strategy evaluation through cost-effectiveness and cost-benefit analysis.
<b>5.</b>	<b>Policy implementation and evaluation (I)</b> Knowledge and skills in the design and conduct of studies evaluating public and private policies and programs. Emphasis on variety of contexts of plan/program implementation and research design issues associated with those contexts.
<b>6.</b>	<b>Policy implementation and evaluation (II)</b> Practical Assignment
<b>7.</b>	<b>Qualitative methods in planning (I)</b> Includes data collection methods (focus groups, interviews, ethnography, participant observation, and participatory action research) and various analytic methods and approaches.
<b>8.</b>	<b>Qualitative methods in planning (II)</b>
<b>9.</b>	Mid term
<b>10.</b>	<b>Geographic information systems (I)</b>
<b>11.</b>	<b>Geographic information systems (II)</b>  Understanding application of methods and models in such specialized areas as land use and transportation planning, economic development, and environmental planning and resource management.
<b>12.</b>	<b>Planning models</b>

	Students design and use spreadsheet models to analyze problems in urban and regional planning. The principal topic include: the use, role, and limitations of mathematical models in planning
<b>13.</b>	<b>Social impact assessment</b> Social Impact Assessment (SIA) looks at the social effects of a policy, program, or project while it is still in the planning stages. SIA is anticipatory research and social forecasting, estimates and appraises the condition of society as organized and changed by major development projects; alerts decision-makers to the significant factors in the social environment affected by a proposed policy, and involves affected parties in the definition of social impacts.
<b>14.</b>	<b>Collaboration between sectors</b> Examine theories and practices of multisector collaboration (public, private, nonprofit). The use of collaboration as an alternative way of solving public problems.

## Week 15-16

### Advance Planning Techniques Practical

Practical involving group of two students engaging in a planning process. Emphasis on dealing with an immediate set of planning issues. Group determines in consultation with resource person

- (1) bounds of the problem(s);
- (2) resources available;
- (3) how the resources will be allocated;
- (4) what impact the group will seek to have;
- (5) services to be delivered or products to be produced (Plan/Policy/Guideline etc.); and
- (6) how it will work as a team to achieve its objectives.

Topic shall vary for each group. The group is involved in implementing, evaluating and reshaping its own plan of operation. Some groups might choose to produce widely-disseminated, published reports, often for specific clients(hypothetical); others, especially those serving community groups, may choose to produce analyses, draft testimony, surveys and guides.

**Course Code: 606**

**Course Title: Housing Policy and Practice**

Program	MS City and Regional Planning
Credit Hours	3 (2+1)
Duration	16 weeks
Prerequisites	None
Resource Person	Dr. Fariha Tariq
Counseling Timing (Room#        )	
Contact	0322-333-2500

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### **Learning Objective:**

On completion of this module, you will be able to assess:

- Understanding the basic concepts of Housing
- Draft of housing policies
- Detailed understanding of policy implementation
- Understanding of housing governance, including understanding the concept of housing policy networks

### **Learning Methodology:**

- Lecturing
- Written Assignments
- Guest Speaker
- Case Studies

### **Grade Evaluation Criteria**

Following is the criteria for the distribution of marks to evaluate final grade in a semester.

<b>Marks Evaluation percentage</b>	<b>Marks in</b>
Quizzes	5
Assignments	10
Mid Term	20
Attendance & Class Participation	5
Term Project	10
Presentations	10
Final exam	40
Total	100



### **Recommended Text Books:**

- Aidala, A. A., & Sumartojo, E. (2007). Why housing?. *AIDS and Behavior*, 11(2), 1-6.
- Malpass, P. (1999). Housing policy and practice. Macmillan International Higher Education.
- Millins, D., Murie, A., & Leather, P. (2006). Housing Policy in the UK. Palgrave.
- Angel, S. (2000). Housing policy matters: A global analysis. Oxford University Press.
- Schwartz, A. F. (2014). *Housing policy in the United States*. Routledge.
- Daphnis, F., & Ferguson, B. (Eds.). (2004). *Housing microfinance: a guide to practice* (p. 298). Bloomfield, CT: Kumarian Press.
- Taylor, J. B. (2007). *Housing and monetary policy* (No. w13682). National Bureau of Economic Research.

### **Reference Books:**

- Davis, S. (1997). *The architecture of affordable housing*. Univ of California Press.
- Leishman, C., & Rowley, S. (2012). Affordable housing. *The Sage handbook of housing studies*, 379-96.
- Ukoha, O. M., & Beamish, J. O. (1997). Assessment Of Residents' Satisfaction With Public Housing In Abuja, Nigeria Habitat International, 21(4), 445 - 460.
- Kutty, N. K. (1999). Determinants Of Structural Adequacy Of Dwelling. Housing Research, 10(1), 27-43

### **Calendar of Course contents to be covered during semester**

<b>Week</b>	<b>Course Contents</b>
1.	Housing as a Phenomenon
2.	Concepts in Housing (Speculation, Real Estate, Densification etc.)
3.	Housing as a tool of Community Development
4.	Interaction between Housing demand and supply
5.	Housing as a tool of Empowerment (Housing Microfinance)
6.	Housing affordability (Factors affecting affordability)
7.	Understanding Housing policy
8.	Case studies: Best Policies and Practices
9.	Planning concepts of House Design
10.	Mid term
11.	Housing Data (Components and Collection)
12.	Housing Stakeholders
13.	Policy review in context of Pakistan
14.	Proposing draft for additional or modification in policies
15.	Drafting a paper on policy and practice
16.	Presentations

**Course Code: CRP-607**

**Course Title: Urban Transportation Planning**

Program	MS. CRP- Urban Transportation Planning
Credit Hours	3
Duration	15
Prerequisites	NONE
Resource Person	
Counseling Timing (Room#        )	
Contact	

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### **Learning Objective:**

1. Command an understanding of what transportation planning is, its theoretical backgrounds and practical applications
2. Understand the important concepts about public transport systems across multiple transportation modes.
3. Identify the roles played by federal government and Metropolitan Planning Organizations (MPOs) in financing transportation infrastructure.
4. Think analytically and strategically about transportation planning policies, and be able to make informed recommendations on proposed capital investments.
5. Refine visual, oral, and written communication techniques, methodological approaches to gather and analyze transportation data, and provide a general understanding of governmental processes and issues of social inclusion with respect to transportation data

### **Learning Methodology:**

- Lecturing
- Practical Assignments
- Guest Speaker
- Case Studies

### **Grade Evaluation Criteria**

Following is the criteria for the distribution of marks to evaluate final grade in a semester.

#### **Marks Evaluation percentage**

#### **Marks in**

Quizzes

Assignments

Mid Term

20

Attendance & Class Participation

Term Project

Presentations

Final exam 80

Total 100

**Recommended Text Books:**

1. Ortuzar, J.D.D. and Willumsen, L.G. "Modelling Transport", John Wiley & Sons, 1990.
2. Ben Akiva, M.E. and Lerman, S.R., "Discrete Choice Analysis : Theory and Application to Travel Demand", The MIT Press, Cambridge, Massachusetts, 1985.

**Reference Books:**

1. Hutchinson, B.G., "Principles of Urban Transport Systems Planning", McGraw Hill Book Company, 1974
2. Kadiyali, L.R., "Traffic Engineering and Transport Planning" Khanna Publishers, New Delhi, 2006

### **Calendar of Course contents to be covered during semester**

<b>Week</b>	<b>Course Contents</b>	<b>Reference Chapter(s)</b>
1	The Future of Transportation: Automated Vehicle Technology	
2	The Evolution of Transportation Planning	
3	Transportation Commute Patterns	
4	Transportation Planning for Racial Equality	
5	Roles of Federal Government and Metropolitan Planning Organizations	

6	Transportation Planning Process: <ul style="list-style-type: none"> <li>• Alternatives Analysis</li> <li>• Land Use connection</li> </ul>	
7	Finance Funding and Budgeting Considerations <ul style="list-style-type: none"> <li>• Revenues</li> <li>• Delivery Methods</li> <li>• Capital Budgets</li> </ul>	
8	Bus Operations <ul style="list-style-type: none"> <li>• Bus Rapid Transit</li> <li>• Port Authority Bus Terminal replacement study</li> </ul>	
9	Rail transit modes <ul style="list-style-type: none"> <li>• Light Rail Transit</li> <li>• Commuter Rail</li> <li>• Intercity</li> <li>• High-Speed Rail</li> </ul>	

10	Transit Oriented Development	
11	Parking in Urban Contexts	

12	Bicycling and Pedestrian Planning	
13	Bus Rapid Transit	
14	Transportation Modeling – Evolving Methodologies	
15	Transport Related Land-use Models: Development of Land-use Models, The Lowry Model, Application of Lowry Model.	



**Course Code: CRP-608**

**Course Title: Environmental Planning**

Program	MS.CRP- Environmental planning
Credit Hours	3
Duration	15
Prerequisites	NONE
Resource Person	
Counseling Timing (Room#        )	
Contact	

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### **Learning Objective:**

1. Explain the major tenets of environmental planning
2. Understand the roles of the different jurisdictional organizations within environmental governance structures
3. Critically analyze the environmental planning structure
4. Explain key aspects of international environmental governance
5. Discuss the implications of current governance practices in relation to sustainable development goals both in Australia and internationally
6. Develop comparative analyses using quantitative and qualitative data to critique current governance systems
7. Communicate in written and oral forms key aspects of environmental planning and governance

### **Learning Methodology:**

- Lecturing
- Practical Assignments
- Guest Speaker
- Case Studies

### **Grade Evaluation Criteria**

Following is the criteria for the distribution of marks to evaluate final grade in a semester.

#### **Marks Evaluation percentage**

Quizzes

Assignments

#### **Marks in**

Mid Term	20
Attendance & Class Participation	
Term Project	
Presentations	
Final exam	80
Total	100

### **Recommended Text Books:**

Griggs, G. and J. Gilchrist. 1977. The earth and land-use planning. Duxbury Press. North Scituate, MA. 102 pp.

Howe, J., E. McMahon and L. Propst. 1997. Balancing nature and commerce in gateway Communities. Island Press. Washington, D.C. 165 pp.

### **Reference Books:**

Strahler A. (2013) Introducing Physical Geography. 6th Edition. John Wiley and Sons, Chichester UK.

Edinger, G., D. Evans, S. Gebauer, T. Howard, D. Hunt and A. Olivero. 2002. Ecological Communities of New York State. New York Natural Heritage Program. Albany, NY. 136 pp

**Calendar of Course contents to be covered during semester**

<b>Week</b>	<b>Course Contents</b>	<b>Reference Chapter(s)</b>
1	Introduction to Environmental planning	
2	Environmental Planning structures	
3	Government environmental planning	
4	Climate change urban planning and the cities	
5	Managing land the problem of urban sprawl	

6	Regional NRM planning	
7	International governance of risk	
8	Database Design and Development	
9	Governing sustainable agricultural development	

10	Low carbon development and urban planning	
11	Environmental surveys for development plans	

12	Carbon footprint	
13	Monitoring the environment	
14	Legal background to environment	
15	EIA/SEA	

**Course Code: CRP-617**

**Course title: Urban Land Management**

Program	MS.CRP- Urban Land Management
Credit Hours	3
Duration	15
Prerequisites	NONE
Resource Person	
Counseling Timing (Room#        )	
Contact	

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**Date.....**

### **Learning Objective:**

- Understanding How Land management system Contributes to Sustainable Urban Development
- Institutions, Policies and Tools for Effective Land management and administration
- How to Integrate technology and land management
- How to manage land markets through land management systems
- Role of governance in land management and administration

### **Learning Methodology**

- Lecturing
- Written Assignments
- Guest Speaker
- Case Studies

### **Grade Evaluation Criteria**

Following is the criteria for the distribution of marks to evaluate final grade in a semester

#### **Marks Evaluation percentage**

#### **Marks in**

Quizzes

Assignments

Mid Term

20

Attendance & Class Participation

Term Project

Presentations

Final exam

80

Total

100



### **Recommended Text Books:**

- Urban Land Markets: Improving Land Management for Successful Urbanization, Editors: Lall, S.V., Freire, M., Yuen, B., Rajack, R., Helluin, J.-J. (Eds.)
- ADB. (2001) Cities Data Book: Asia and Pacific Region. Presentation at the dissemination workshop on February 15-16, 2001.
- BERTAUD, A. (2004) The Spatial Organization Of Cities: Deliberate Outcome or Unforeseen Consequence? (<http://alain-bertaud.com/>)
- CHESHIRE, P. and SHEPPARD, S. (2004) Land markets and land market regulation: progress towards understanding. Regional Science and Urban Economics, 34, p. 619-637.

### **Reference Books:**

- Regenerating Urban Land : A Practitioner's Guide to Leveraging Private Investment

### **Calendar of Course contents to be covered during semester**

Week	Course Contents	Reference Chapter(s)
1	Definition and concepts related to land management	
2	Land governance	

3	land information for sustainable land administration	
4	Spatial data infrastructure	
5	Dynamics of land supply and demand	
6	Geospatial data sharing in Pakistan	
7	Urban land reforms	
8	Access to land	

9	Land transaction and land development process in developed and developing countries	
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10	Role of central, provincial and local government, NGOs, Cooperatives, and Property dealers, The informal Sector in land management	
11	Forms of land tenure and their characteristics	
12	Land registration and titling process; constraints and opportunities; private sector involvement in land registration and titling	
13	Strategies, policies	
14	land administration and land record management information system of Pakistan	
15	Regulations and instruments to ensure effective urban land management and their relevance to developing countries	

**Course Code: CRP-618**

**Course Title: Implementation of Policies and Plans**

Program	MS City and Regional Planning
Credit Hours	2 (Th) + 1 (Pr)
Duration	16 Weeks
Prerequisites	None
Resource Person	Nabeel Shakeel
Counseling Timing (Room #        )	
Contact	<a href="mailto:nabeel.shakeel@umt.edu.pk">nabeel.shakeel@umt.edu.pk</a>

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### **Learning Objective:**

- To examines:
  - Formulation of policy and plans
  - Implementation of public policy and plans
  - Evaluation of governmental efforts at Federal, Provincial, and Local Level.
- Understanding of the policy analysis and implementation, and policy advocacy.
- Understanding role of government and other stake holders in policy formulation and implementation.

### **Learning Methodology:**

It is a universal truth that learning is an interactive process. As said by a philosopher, if you hear, you forget; if you see, you believe; and if you do, you understand. Thus, to get the extreme benefit from this subject, students will need to contribute by sharing your insights as we explore how policy is made and policy and plans implementation issues.

There will be the following activities for your great learning:

- Written exams
- Presentations
- Assignments
- Case Studies
- And an Original Term Paper

## **Grade Evaluation Criteria**

Following is the criteria for the distribution of marks to evaluate final grade in a semester.

<b>Marks Evaluation</b>	<b>Marks in percentage</b>
Quizzes	10%
Assignments	10%
Mid Term	30%
Attendance & Class Participation	5%
Presentations	5%
Final exam	40%
Total	100%

## **Recommended Text Books:**

Dye, T. R. (2012). Understanding Public Policy. *Pearson Publisher*

Hill, M., and Hupe, P. L. (2002). Implementing Public Policy: Governance in Theory and in Practice. *SAGE Politics Texts Series*

Grindle, M. S. (2017). Politics and Policy Implementation in the Third World. *Princeton University Press*

## **Reference Books:**

Christopher A. Simon, Brent S. Steel, and Nicholas P. Lovrich. (2018). State and Local Government and Politics: Prospects for Sustainability (2<sup>nd</sup> Edition). *Oregon State University*

Kugelman, M., and Husain, I. (2018). Pakistan's Institutions: We know they matter but how can they work better? *Washington D.C. Woodrow Wilson Center*

Fischer, F., Miller, G. J., and Sidney, M. S. (2006). Handbook of Public Policy Analysis: Theory, Politics, and Methods

Birkland, T. A. (2011). An Introduction to the Policy Process: Theories, Concepts, and Models of Public Policy Making. *Routledge Taylor and Francis Group*

Pollitt, C. et al. (1979). Public Policy in Theory and Practice: A Reader, *Hodder & Stoughton Open University Press*

### **Calendar of Course contents to be covered during semester**

<b>Week</b>	<b>Course Contents</b>	<b>Reference Chapter(s)</b>
1	Introduction to Policies and Plans What they are? Types of policies and plans! Why they are important for the urban planners?	
2	Policy Analysis: Is There Any Need? What governments do? Why they do it? What difference it makes?	Chapter 1 in Understanding Public Policy
3	Models of Political Intervention Some help in thinking about public policy!	Chapter 2 in Understanding Public Policy

4	The Policymaking Process: International Context Decision-making activities!	Chapter 3 in Understanding Public Policy
5	The Policymaking Process: Pakistani (Local) Context Decision-making activities!	Read the article by <a href="#">Ishrat Hussain</a>
6	Policy Evaluation Finding out what happens after it is passed!	Chapter 4 in Understanding Public Policy
7	Implementation Theory The top-down/bottom-up debate	Chapter 3 in Implementing Public Policy: Governance in Theory and in Practice Also read: <a href="#">Article</a>
8	Mid Term Exam	
9	The Rise and Decline of the Policy-Implementation Paradigm Distance in prosperity Pragmatism in the new millennium	Chapter 5 in Implementing Public Policy: Governance in Theory and in Practice



10	Case Study Policy formulation and implementation EU transport research project!	<a href="#">Report</a>
11	Case Study Choice and Consequence of Implementing Policies and Plans Administrative decentralization and the implementation of housing policy in Colombia	Chapter 6 in Politics and Policy Implementation in the Third World
12	Key Actors and the Policy Process in State and Local Governments	<a href="#">Recommended Reading</a>
13	Key Actors and the Policy Process in State and Local Governments	<a href="#">Recommended Reading</a>
14	Policies and Plans Making and Implementation in Pakistan Role of bureaucracy, federal government, provincial government, and local government	<a href="#">Recommended Reading 1</a> <a href="#">Recommended Reading 2</a> <a href="#">Recommended Reading 3</a>
15	Policies and Plans Making and Implementation in Pakistan Role of bureaucracy, federal government, provincial government, and local government	<a href="#">Recommended Reading 1</a> <a href="#">Recommended Reading 2</a> <a href="#">Recommended Reading 3</a>

16	Final Term Exam	
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**Course Code: CRP-616**

**Course Title: Mathematical Modelling in Planning**

Program	MS City and Regional Planning
Credit Hours	2 (Th) + 1 (Pr)
Duration	16 Weeks
Prerequisites	None
Resource Person	Aqsa Qalb
Counseling Timing (Room # )	
Contact	<a href="mailto:aqsa.qalb@umt.edu.pk">aqsa.qalb@umt.edu.pk</a>

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### **Learning Objective:**

In this subject:

- Students will learn to use mathematical models to represent real life situations.
- Students will learn how to apply the models in determining urban growth patterns.

### **Grade Evaluation Criteria**

Following is the criteria for the distribution of marks to evaluate final grade in a semester.

<b>Marks Evaluation</b>	<b>Marks in percentage</b>
Quizzes	10%
Assignments	10%
Mid Term	30%
Attendance & Class Participation	5%
Presentations	5%
Final exam	40%
Total	100%

### **Recommended Text Books:**

*(Mathematical Modelling in Planning Learning Outcomes - Google Search, n.d.)*

(Rui, 2013)

### **Calendar of Course contents to be covered during semester**

<b>Week</b>	<b>Course Contents</b>
1	Introduction to Mathematical Modelling What they are? Uses of Mathematical Modelling Why they are important for the urban planners?
2	Sampling Techniques Learn different sampling techniques that will be helpful in collection of data
3	HYPOTHESIS TESTING Foundation of Hypothesis Testing; Understanding the Type of Test; Steps to Hypothesis Testing; Probability Values; Using a Confidence Interval to Test a Claim; Testing a single mean; Testing a single proportion; The chi-square distribution Table; Chi-Square Probabilities; Testing a single variance
4	REGRESSION Inference for Correlation; Multiple Regression Model;
5	REGRESSION Linear Relationships; Simple Linear Regression; Coefficient of Determination;
6	TIME SERIES ANALYSIS

7	Presentation
8	Mid Term Exam
9	INTRODUCTION TO ANOVA Introduction to Analysis of Variance; A Statistical Test for One-Way ANOVA;
10	INTRODUCTION TO ANOVA Multiple Comparisons; Two-Way ANOVA
11	Modelling urban growth using Urban growth deterministic model: a geo-statistical approach
12	Introduction to Data Sciences Data Sciences Techniques
13	Urban Growth Modeling Based on Land-use Changes and Road Network Expansion
14	Urban Growth Modeling Based on Land-use Changes and Road Network Expansion

15	Final Project Submission and Evolution
16	Final Term Exams