

## **Advance Planning Techniques**

<b>Code</b> URP 801	<b>Credit Hours</b> 3-0
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### **Course Description**

The course aims to teach the students about all planning components and advanced planning techniques to plan and develop urban centers. The course explores modern specialized methods planners use for local, metropolitan and regional planning to turn information into forecasts, goals, strategies and plans for long-range planning. The development of applied planning skills is the pivotal part of this course. The student will prepare a project, several short assignments, and case studies in the class. After the course, the student should have a firm, all-around knowledge of urban planning and make the planning proposal for urban & regional development.

### **Textbooks:**

1. A.J. Catonese, Scientific Methods of Urban Analysis, (Latest Edition)
2. Lichfield N., P.Kettle, M. Whitebread, Evaluation in the Planning Process, Pergamon Press, Oxford, (Latest Edition).

### **Reference Books:**

1. System Analysis and Design in Engg. Architecture Construction and Planning, (Latest Edition).
2. Text Publication, Leonard Hill Books, University of Illinois Press. (Latest Edition)
3. Oppenheim N., Urban Applied Models in Urban and Regional Analysis, Princeton Hall Inc. N.J. 1980.
4. Petter Hall and Ulrich Pfeffer, Urban Future 21 (Latest Edition).
5. David Harvey, Social Justice and The City, (Latest Edition).
6. Campbell Scott and Fainstein Susan, Readings in Planning Theory, (Latest Edition).
7. Fainstein, Reading in Urban Theory, (Latest Edition).
8. Campbell, Reading in Planning Theory, (Latest Edition).
9. Battley, P.W.J editors, Theory and Method in Urban and Regional Analysis, London, Pion Ltd, (Latest Edition)
10. Paris, Chris, Critical Readings in Planning Theory, Pargamon, Oxford, 1982
11. Faludi Andreas, Planning Theory, Pargamon, Oxford, (Latest Edition)
12. Burchell, R.W., Planning Theory in the 1980s, N.J. Centre Urban Planning, 1980 Railway Engineering, By M M Agarwal, and Satish Chandra
13. A.J. Catonese, Scientific Methods of Urban Analysis, (Latest Edition)
14. Lichfield N., P.Kettle, M. Whitebread, Evaluation in the Planning Process, Pergamon Press, Oxford, (Latest Edition)
15. Scenario Planning for Cities and Regions by Robert Goodspeed, Lincoln Institute of Land Policy, 2020

## Prerequisites

Nil

## Assessment System for Theory

Quizzes	10-15%
Assignments	5-10%
Mid Terms	25%
ESE	40-50%
Term Project	10%

## Teaching Plan

Week No	Topics	Learning Outcomes
1	Critical Review of the Planning Process in Pakistan	To understand planning as a cyclic process and issues related to the development planning process, focusing on Pakistan.
2- 3	Application of the Logical Framework Approach, problem identification techniques, and goal formulation techniques in the planning process	Application of directions and choices in the pre-planning stage of the planning process
4-5	Use of Artificial Intelligence (AI) Techniques/Software in Planning Data Collection and Analysis Introduction to Big Data for Sustainable Development	To understand the use of modeling techniques in planning, especially focusing on applying AI and big data.
7	Use of Logistic model for population growth Use of Exponential Population Growth Model	To learn and apply population forecasting and growth techniques in urban planning.
8	Development Policy and Planning Models Policy Analysis Indicators for Policy Analysis	To learn the public policy formulation process and its short- and long-term evaluation.
9	<b>MID SEMESTER EXAM</b>	

10-11	Plan(s) evaluation process & techniques Introduction of AI in Plan(s) Evaluation process Cost-benefit analysis	To develop students' understanding of different plans, such as Master and Action Area Plans, and their evaluation techniques to select the best and most optimal plan.
12-13	Plan evaluation process & techniques Analytic hierarchy process (AHP)	To develop students' understanding of different plans, such as Master and Action Area Plans, and their evaluation techniques to select the best and most optimal plan.
14-15	Application of GIS in Development Planning Developing GIS-based Master Plan, Local area Plan & Development Plan	To enhance students' understanding of the use of GIS in the urban planning process and develop their knowledge of how GIS can be used to solve urban issues.
16	Plan Implementing Techniques Plan Implementation Process e-Planning	To strengthen students' understanding and to learn planning techniques to implement urban plans successfully.
17	Public Participation in Implementation Planning	To understand how public participation can be ensured in the planning process at various stages and how different stakeholders can be identified and consulted to build consensus on an issue
18	<b>END SEMESTER EXAM</b>	