

Prerequisite status: -	Unit Type: Basic - Theoretical	The number of units: 2	Name of the lesson: Research methodology and future study in urban planning
Type of additional practical training: Has it <input type="checkbox"/> does not have <input checked="" type="checkbox"/> Science travel <input type="checkbox"/> Laboratory <input type="checkbox"/> Workshop <input type="checkbox"/> , Seminar <input type="checkbox"/>		The number of hours: 32	
Goals: Acquaintance of students with the intellectual insights of methodology in studies and urban planning, improving analytical power, and the ability to carry out large-scale projects and doctoral dissertations.			
Headlines 1- Concepts and philosophy of scientific research and its characteristics. 2- Ontology of research and epistemology of quantitative and qualitative research. 3- Theoretical foundations of qualitative and quantitative research methods (positivism, phenomenology, hermeneutics, etc.). 4- Method and characteristics of qualitative and quantitative research methods. 5- Types of scientific research and its rules regarding goals (fundamental, applied, development). 6- Types of research methods and their functional nature (causal, correlational, descriptive, analytical, experimental, etc.). 7- Formulation of the research plan, research problem, its necessity, research objectives, literature and research records, research hypotheses, etc. 8- Information collection methods and documentary and field studies. 9- Sampling, concepts, types, and methods of its selection. 10- Using statistical software to extract, integrate and analyze documentary and field information. 11- Criticism of quantitative and qualitative research methods, principles, and theoretical framework explaining the methods. 12- Ethical principles in research. 13- Necessities and practical requirements of applying decision-making methods and techniques in urban planning. 14- Decision-making process and its methods in urban planning. 15- The basics of future research, schools of future research, scenario writing, futurology, and future research. 16- scientific stages of scenario writing; Problem formulation, and system testing. 17- Future research methodology; exploratory and normative in scenario writing. 18- Identifying the factors of the future and the drivers affecting future research.			

- 19- Uncertainties and probabilities in events and incidents affecting urban planning.
- 20- Compilation and definition of the project in the field of futurology and scenario writing.
- 21- Familiarity with future research software (Mac Mac, Scenario Wizard, etc.).
- 22- Carrying out a practical project in a pilot city.

Reference

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