

Prerequisite status: -	Unit Type: Theoretical /practical	The number of units: 2	Name of the lesson: Rural planning and models and techniques
Type of additional practical training: Has it <input checked="" type="checkbox"/> does not have <input type="checkbox"/> science travel <input type="checkbox"/> Laboratory <input type="checkbox"/> Workshop <input checked="" type="checkbox"/> , Seminar <input type="checkbox"/>		The number of hours: 48	Expert professor to teach: Expert in models and techniques in rural planning
Goals: Acquaintance of rural planning students with rural planning techniques and models			
Headlines 1- The place of models and techniques in rural planning 2- Defining the model and its types 3- Types of rural planning models and techniques - Methods of clarifying rural issues and problems (including thoughts, problem statement guidelines, problem strengths-weaknesses-opportunities and threats, logical framework, force field analysis, comparative matrix) - Methods and models of environmental, economic, and social evaluations - (Including rapid rural assessments, participatory cost-benefit analysis assessments, data and output tables, share-change model, basic economy model and Multiplier Coefficients, environmental impact assessment) - Future planning methods (including trend extrapolation, scenario creation, and historical knowledge) - Decision-making and policy-making methods and models (methods of de-scaling indicators, SAW, PROMETEE, VIKOR, AHP techniques) - Methods and models of spatial relationship analysis (including centrality index, access index, spatial flows index, maps, and computer simulations based on spatial analysis). - forecasting methods and models (including qualitative models, time series models, and causal models) 4- Choosing a rural area, preferably a rural system, and the practical application of models and techniques in it			
Reference 1- Asgharpour, Mohammad Javad (2008) "Multi-criteria decision-making." Tehran University Press. 2- Pourtaheri Mehdi (2011) "The application of multi-criteria decision-making methods in geography" Samt University Publications, 4th edition 3- Kalantari, Khalil, 2004, regional planning and development, theories and techniques, Tehran University Publications 4- Gwo-Hshiung Tzeng, Jih-Jeng Huang, 2011, Multiple Attribute Decision Making Methods and			

Applications, Chapman and Hall/CRC

5- Alireza AlinezhadJavad Khalili, 2019, New Methods and Applications in Multiple Attribute Decision Making (MADM), Springer, Cham

6- Mr. David Cotton, 2016, The Smart Solution Book: 68 Tools for Brainstorming, Problem Solving and Decision Making Kindle Edition, Kindle Edition

7- Vommi, V.B., Kakollu, S.R. A simple approach to multiple attribute decision making using loss functions. J Ind Eng Int 13, 107–116 (2017). <https://doi.org/10.1007/s40092-016-0174-6>