

Prerequisite status: -	Unit Type: Theoretical	The number of units: 2	Name of the lesson: Geomorphology and spatial planning of water resources
Type of additional practical training: Has it <input type="checkbox"/> does not have <input type="checkbox"/> Science travel <input type="checkbox"/> Laboratory <input type="checkbox"/> Workshop <input type="checkbox"/> Seminar <input checked="" type="checkbox"/>		The number of hours: 32	
Goals: Acquainting students with Geomorphological issues of spatial planning of water resources and its relationship with sustainable development and the role of Geomorphology in spatial planning of water resources systems, land use, and reducing instabilities and environmental crises.			
Headlines 1- The principles of geomorphology in the planning of water resources spaces, 2- The changes in water resources and their place in spatial planning, 3- Geomorphology in the spatial planning of water resources in cities and villages. 4- Stream geomorphology and spatial planning of water resources, 5- The place of geomorphological maps in environmental spatial planning 6- The place of geomorphology in spatial planning of watersheds 7- Spatial planning of water resources and geomorphological hazards 8- Methods of developing water resources to respond to population growth and high consumption of water and their environmental effects 9- Development of infrastructures in water areas and their environmental effects 10- Methods, models, and theoretical foundations of spatial planning of water resources			
Reference 1- Water resources management, 2008, Sabze Andish Managers Plan Publications 2- Environmental planning for water, transportation and land use, 2010, Wendy Lamer, McGraw-Hill Companies. 3- Water resource system planning and management an introduction to methods models and applications, 2005, Daniel p. Locks and Eelco van Beek, UNESCO publishing.			