

Prerequisite status: -	Unit Type: One theoretical, one practical	The number of units: 2	Name of the lesson: Spatial analysis of climatology data with geographic information system
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 type="checkbox"/> , Seminar <input type="checkbox"/>		The number of hours: 48	Expert professor to teach: climatologist
Goals: Acquaintance of students with climatological data analysis methods in GIS			
Headlines 1- An overview of geographic information system concepts 2- Data structure in geographic information system 3- Basics of preparing climatological maps using a geographic information system 4- Types of interpolation methods 5- Formation of spatial database using geographic information system 6- Spatial analysis of climatology data using a geographic information system 7- Geographical regression models for climate data analysis 8- Practical work and programming with geographic information system software			
Reference 1- Halebian, Amir Hossein and Saeed Movahedi, 2019, Spatial Analysis of Climatology Data, with Geographical Information System, Isfahan University Academic Jihad 2- Farajzadeh, Manouchehr, 2010, Basics of Geographical Information System, Selected Publication 3- Alimohammadi, Abbas, 2009, Basics of Geographical Information Sciences and Systems, Samt Publications 4- Movahedi, Saeed, Mahmoud, Soltanian, 2011 Geographical and Climatology Information System, Konkash Publications 5- Dobesch Hartwig, Pierre Dumolard, et al., 2013, Spatial Interpolation for Climate Data: The Use of GIS in Climatology and Meteorology, Wiley- ISTE			