

Prerequisite status: -	Unit Type: Theoretical	The number of units: 2	Name of the lesson: Research method in 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: 34	Expert professor to teach: GIS
Goals: Familiarizing students with research methods in geographic information systems and their steps			
Headlines 1- Definitions, nature, principles, and processes of research 2- Research areas in geographic information systems 3- Theoretical research approaches (analytical-experimental, historical-hermeneutic, critical, methodological) 4- The process of compilation of geographic information system research 5- Data collection methods (types of data including quantitative and qualitative, preparation of reagents, sampling, preparation of questionnaires and inquiry methods) 6- Methods of analyzing data (quantitative and qualitative analysis methods, types of analysis including descriptive and analytical, remote sensing analysis techniques, and geographic information system including the introduction of analysis software) 7- Conducting research: examples of research (the process of designing research plans) 8- Evaluation methods (definitions and types of evaluation, principles, and process of assessments, evaluation methods) 9- Implementation of an evaluation plan 10- The status of geographic information system research in the world and Iran			
Reference 1- Arabian Ehsan and Seyyed Ali Modaresi, 2015, research method in spatial sciences, Yazd Islamic Azad University Publications. 2- Hafez Nia, Mohammad Reza, 1998, an introduction to research methods in humanities, Samt Publications. 3- Liaqat, Gholamhossein, 1998, research method in engineering sciences, Scientific and Industrial Research Organization of Iran,			