

REVISED LEARNING OUTCOMES MATRIX
HYDROLOGY/GIS 400

Course Description: This course will be about the National Water Information System Web Data in the USA provided by the US Geological Survey(USGS). The data produced by USGS is in the public domain.

Target Audience: It is designed for the Community College, Graduate / Professional, Adult Education.

My course goal: Students will be able to discuss, analyze, compare and create graphs and maps of various types of water resources system available in the USA.

LEARNING OUTCOMES In this course, students will:	ASSESSMENTS	ACTIVITIES
Identify and summarize real-time and historical data retrievable by geographic area for surface water, groundwater, and water quality conditions such as temperature, specific conductance, pH, nutrients, pesticides, and volatile organic compounds from the USCG site.	Quizzes after each module	Read and watch Tutorials about surface and ground water and water quality conditions.

locate any address and identify FEMA Floodplain limits near that particular address	creating floodplain maps with three different base(background) maps	locate any address and identify FEMA Floodplain limits near that particular address
Analyze data and create a graph with statistics of one or more state's water resources system in the USA.	Rubric	Create a graph with statistics of 2 more sites and replot for "Depth to water level, feet below land surface".
Apply the knowledge of GIS mapping and spatial analysis to create a buffer zone around certain data points/lines using QGIS software	create PDF map	create a buffer zone around certain data points/lines using QGIS software
Design and construct a map using QGIS software about each of the available water resources in the USA.	create PDF map	designing and constructing a map using QGIS software about each of the available water resources in the USA

