

GEOL 452 Hydrology

Instructor: William E. Sanford

Course Description:

- This course will cover the fundamental physics of groundwater flow in porous media. The emphasis will be on physical hydrogeology. The course is intended to provide the required background for geologists, watershed scientists, and engineers who would like a working knowledge of groundwater as well as for advanced study in hydrogeology, hydrology, hydrogeochemistry, and environmental geology.

Learning Outcome:

- Understand the control of geology on the location and utilization of groundwater resources.
- Determine the parameters of aquifers which control the flow and quantity of groundwater resources.
- Gain experience in site investigations for the remediation and protection of groundwater resources.
- Appreciate how groundwater and surface water interact and can often be considered a single resource.
- Understand that groundwater resources are finite and that they are often exploited in a non-sustainable manner.