

GEOL 10: Environmental Geology

Mid-Term II Study Guide

Mapping

What is an elevation contour? What are index contours? How might one calculate the gradient of a slope? What is the “rule of vs?”

Hydrology

What drives the water cycle? What is evapotranspiration? What is a flood? What types of floods are there? What is discharge? How does one calculate discharge? How are discharge and drainage area related? What are some factors that contribute to flooding? What is lag time? What is the difference in lag time between urban and rural rivers? How does straightening a river change the river? What are some affects and effects of these changes? What is a river gage? What is the river stage? What is a stage-discharge rating curve? How do we create stage-discharge rating curves? How do we use stage-discharge rating curves? Why? What is a hydrograph (describe what is on the horizontal and the vertical axes)? What is storm flow? What is base flow? What does it mean that a hydrograph is flashy?

Hydrogeology

What is hydrogeology? What is the water table? What is a capillary fringe? What is the difference between porosity and permeability? What is an aquifer? What is an aquiclude/aquitard? What is hydraulic head? What is the difference between a gaining and a losing stream? What is an artesian well? What are the factors that control water flow (Darcy’s Law)?