

On a basis of national and international rules and regulations the students will assess resources for drinking water and develop measures for their protection. The protection of resources is a combination of knowledge about processes like bank filtration and soil as a biological filter and activities like the cooperation with the farmers including groundwater modelling as a reliable tool. With this awareness, the definition of quality criteria will be useful to develop an efficient treatment system and to integrate a management system. A risk based assessment will emphasize the advantages and disadvantages of treatment systems including ozone, filtration, adsorption with activated carbon and membranes.

The requirements for a drinking water quality according to the guidelines of the WHO (World Health Organisation) also define the performance of a water-safety-plan and the requirements of the working staff and the material applied in the treatment and distribution system. The quality management for water includes the interaction and communication with the client and their responsibility for the drinking water quality in sanitation. The communication with the clients and the authorities is of great importance not only in emergency cases. The quality management in the water supply also includes measures for emergency in order to provide the clients with sufficient information and to apply disinfection measures to obtain a safe drinking water quality.