

# Hydraulics

## Module Perspective

1. What is the topic?
2. Who is (are) the audience(s)?
3. What is the course goal?
4. What are the learning objectives?
5. What are you trying to cover?
6. How do you plan to do this?
  1. The topic for this course module is applied hydraulics for onsite system design.
  2. The target audience includes senior-level and graduate environmental engineering and environmental science students.
  3. The goal of this course module is to teach students the necessary applied hydraulics for the design and design review of gravity flow and pressure flow decentralized wastewater systems.
  4. After the successful completion of this module, the students will be able to size the hydraulic features (pipes, tanks, pumps) required for an decentralized wastewater system.
  5. Topics included in this course module are the essential aspects of applied hydraulics necessary for onsite systems including; relevant properties of water, continuity and energy considerations, frictional losses, pump characteristics and overall system design.
  6. This course module includes a use of PowerPoint presentations, graphics, text, and design examples.