



# WQT 227 Wastewater Treatment Solids

## Course Description

This course covers wastewater treatment system operation and maintenance. Emphasis is placed on the solids fraction of the waste stream. Prepares students for the Wastewater Treatment Operator Level I State examination.

## Course Learning Outcomes (CLOs)

Students who successfully complete this course will:

1. Describe the basics of solids handling in wastewater treatment.
2. Explain the purpose and processes of solids thickening and solids dewatering.
3. Describe the purpose and process of aeration systems in wastewater treatment.
4. Describe the purpose and process of aerobic and anaerobic digestion in wastewater treatment.

## Topics

1. Introduction to Solids Handling
2. Thickening
3. Aerobic Digestion
4. Anaerobic Digestion
5. Dewatering
6. Electrical Fundamentals and Motors
7. Pumps and Lift Stations
8. Aeration Systems
9. Laboratory Procedures
10. Chemical Storage, Handling, and Feeding