



WQT 260 Water Treatment

Course Description

Covers the fundamentals of water treatment facilities, including operation and maintenance of facilities. Prepares students for the Water Treatment Operator Level I State examination.

Course Learning Outcomes (CLOs)

Students who successfully complete this course will:

1. Describe management, operation, and maintenance of water treatment systems including source waters, water intakes, treatment processes, and treated water retention.
2. Explain the regulatory basis for mandated treatment methods and the regulatory bodies responsible for enforcement.
3. Evaluate process performance based on available laboratory data, field observations, and process control mathematical calculations.
4. Describe causes of abnormal operating conditions and necessary remedial actions.

Topics

1. Water Treatment Plant Operator and Water Sources and Treatment
2. Reservoirs and Intakes
3. Coagulation and Flocculation
4. Sedimentation
5. Filtration
6. Disinfection
7. Corrosion Control
8. Taste and Odor
9. Laboratory
10. Plant Operation