

## **ENVHEL-145: Water/Wastewater Operations-Municipal**

## Course Description:

Operational procedures and facilities used in public water supply treatment and wastewater/water reclamation treatment are studied. Methods of establishing and maintaining hydraulic flow and techniques for chemical treatment, nutrient removal and an overview of applicable regulations are integrated into the course. Field trips to local facilities are during class time in order to demonstrate various procedures and treatment process methods. Laboratory work may include demonstrations or hands on testing.

Total Credits: 3.00

## Course Competencies

- 1. Classify sources of water and their characteristics.
- 2. Apply environmental regulations to water and wastewater treatment/water reclamation
- 3. List health concerns of polluted water
- 4. Explain drinking water treatment plant operations.
- 5. Explain wastewater treatment/water reclamation plant operations.
- 6. Differentiate between the water and solids tests performed for wastewater treatment/water reclamation.
- 7. Calculate mathematical measurements used in water treatment.
- 8. Identify instrumentation used in water and wastewater treatment/water reclamation systems
- 9. Identify future water trends
- 10. Discuss professional ethics