CREDIT HOURS: 3.00

CONTACT HOURS: 45.00

COURSE DESCRIPTION:
Considers drinking water treatment technologies beyond conventional processes. Includes softening, ion exchange, activated carbon absorption, aeration, air stripping, and membrane processes. Includes participation in field tours and discussions on safety and health, sampling procedures, record keeping, data preparation, report writing and the analytical procedures used to determine and measure drinking water quality.

PREREQUISITES: NONE

EXPECTED COMPETENCIES:
Upon completion of this course, the student will be familiar with:
- Understand basic and advanced water treatment processes
- Understand the basics of equipment used in water treatment
- Understand troubleshooting procedures
- Understand the physical, chemical and biological aspects of water treatment
- Understand the goals of process optimization
- Understand key operational issues, safety, efficiency & teamwork

ASSESSMENT METHODS:
Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

GRADING SCALE:
90%-100% = A
80%-89.9% = B
70%-79.9% = C
60%-69.9% = D
<60% = E