

Course Description Sheet

COURSE TITLE

Coagulation, Flocculation and Sedimentation

COURSE DURATION

1 Hour

OVERVIEW

Many sources of water to drink are not safe unless treated. Natural and manmade impurities and contamination are common in most all sources of drinking water.

Surface water sources such as lakes and rivers are open to contamination from animals, humans, and other pollution and are susceptible to contamination caused by organisms such as bacteria, viruses, and parasites – all of which can cause serious illnesses or death. Ground waters can be polluted by chemicals and pathogens too.

This course covers several process steps used to treat a raw drinking water source into potable drinking water. These steps are Coagulation, Flocculation, and Sedimentation for Drinking Water Treatment.

PREREQUISITES

No prior knowledge is required.

BEHAVIORAL OBJECTIVES

After successfully completing this course, you will be able to:

- Assess why the processes of coagulation, flocculation, sedimentation, and filtration are necessary in the treatment of drinking water
- Know the potential contaminants needed to be removed from raw water
- Know the treatment levels to produce drinking water
- Explain the terms: coagulation, flocculation, sedimentation, and filtration
- Describe the chemicals used in the process of coagulation
- Identify the purpose of why jar tests are conducted
- Know the treatment steps from raw water to finished water for a surface water drinking water treatment plant

COURSE OUTLINE

Chapter	Minutes
Introduction	10
The Drinking Water Treatment Process	22
Coagulant Chemistry	25
Conclusion	3
Course Total	60

AVAILABILITY

This course is offered online and is available 24 hours a day, 7 days a week, 365 days a year.

TRAINING METHODOLOGY & EVALUATION

This course is self-paced online training. Review exercises reinforce the content, and students are evaluated with a multiple-choice exam. Upon completion, students are prompted to submit a course evaluation.

REFERENCES

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