

Applied Chemistry

Course Overview

This course is designed to acquaint students with the chemistry principles involved in water treatment, storage and distribution, and the math that applies to chemistry principles. Course material consists of reading assignments, video lectures, review questions, study problems and lesson quizzes.

Course completion requires that the student successfully complete each component of each individual lesson. Review questions and written assignments must be submitted either online or uploaded in a Word document for the professor's review. Lesson quizzes have a minimum passing score of 70%.

Upon successful completion of the course requirements, students will receive a certificate of completion for the Applied Chemistry course, which is applicable toward a Certificate in Water Treatment Technology from American Water College.

Required Texts

Textbook: *Basic Science Concepts and Applications, Principles and Practices of Water Supply Operations* series

Edition: Fourth Edition

Author: Nicholas G. Pizzi

ISBN: 1-58321-778-9

Workbook: *Basic Science Concepts and Applications Student Workbook, Principles and Practices of Water Supply Operations* series

Edition: Fourth Edition

ISBN: 1-58321-799-1

Educational Objectives

- To provide students with an overview of the structure of matter
- To provide students with an overview of the classification of matter
- To acquaint students with chemical formulas and equations
- To provide students with an overview of solutions, calculating solutions and dilution calculations
- To acquaint students with acids, bases and salts
- To provide students with an overview of the chemistry of water treatment processes
- To acquaint students with chemical dosage problems and calculations