

Electrical Review & Safety

Instructor: Brad Ziegler

Wednesday, October 30, 2024

LOCATION..... Jefferson College Hillsboro – Student Center Viking Room

COST \$125 per person

CRN # 27903

DNR # 24061120

Drinking Water	Distribution	Wastewater
6.0	6.0	6.0

Morning Course Itinerary:

- 7:45 – 8 AM Registration, Log-in, Refreshments
- 8 – 10 AM Explanation of basic principles of electricity: Basic Electric Circuit Concepts: Voltage, Current, & Resistance Fundamentals of Electromagnetism, Inductance, and Capacitance; Overview of Power Systems in Water/Wastewater Facilities Methods of measuring current, voltage, and resistance using basic tools
- 10:15 AM–12:15 PM Electrical Measurements /Troubleshooting
 - Hands on demonstration of Digital Multimeters (DMMs), Clamp on Ammeters and Voltage Sensors
 - Techniques for diagnosing electrical issues within water/wastewater systems

Afternoon Course Itinerary:

- 1:15 – 2:30 PM Electrical Safety/Lock-Out Tag Out
 - Selection and proper use of electrical protection devices
 - Lockout/Tagout procedures and devices
 - Importance of grounding, proper polarity, and securing energy sources before maintenance
- 2:45 – 4 PM Wiring/Transmission Lines, AC/DC Motor Theory
 - Overview of distribution systems commonly used in treatment plants
 - Detailed discussion on AC/DC motor theory and operation
 - Practical troubleshooting techniques for motor-related issues
- 2:40 – 3:40 PM Aeration-Part III
 - The basics and impacts
 - a. Types of diffusers
 - b. Types of mechanical aerators
 - Operating characteristics
 - Maintenance requirements
 - Operating Strategies

GREEN WASTEWATER VOUCHERS ARE APPROVED FOR THIS SEMINAR

HOW TO REGISTER:

PHONE

MC/VISA/Discover only
Call our 24-Hour Customer Service Line:
(636) 481-3144 / TDD (636) 789-5772

MAIL

Use registration form (below) & mail to:
Lore Robart
Jefferson College
1000 Viking Drive
Hillsboro, MO 63050

IN PERSON

Jefferson College Hillsboro, CTE101
Workforce & Employment Services
Mon-Fri: 7 AM - 3:30 PM

E-MAIL

MC/VISA/Discover only
lrobart@jeffco.edu

Requests for refunds must be made 48 hours prior to course starting time

Use this form for mail-in and fax registration only. Please make check payable to JEFFERSON COLLEGE.



CONTINUING EDUCATION REGISTRATION FORM

Male
 Female _____
Last First Middle

Social Security # _____
OR Student ID _____

Address _____
Street City State Zip

Home Phone _____ Business Phone _____ Date of Birth ____/____/____

E-mail _____

Request for full refund must be made 48 hours prior to course starting time.

PLEASE REGISTER ME FOR THE FOLLOWING COURSE:

REFERENCE #	COURSE TITLE	DAY & TIME	DATE BEGIN	FEE
27903	Electrical Review & Safety	Wednesday, 8 AM	October 30, 2024	\$125

MasterCard VISA Discover Card # _____ Exp. Date _____

OFFICE USE ONLY: Phone Walk-In Mail Fax On-Site
Received by: _____ Date: _____ Time: _____ AM ____ PM ____