



COURSE OUTLINE: OEL859 - WATER-OIT CERT PREP

Prepared: Subhash Verma

Approved: Lori Crosson, Director, E-Learning and Continuing Education

Course Code: Title	OEL859: DRINKING WATER OPERATOR IN TRAINING CERT																								
Program Number: Name																									
Department:	DISTANCE EDUCATION																								
Semesters/Terms:	20S, 20F, 21W																								
Course Description:	This course is intended to provide students with basics as related to the operation of water treatment and distribution systems. The basic concepts in science and math are discussed first. This is covered under topics including: conversions, math, chemistry, hydraulics, electricity. It will be followed by topics on support systems mainly pertaining to pumps and motors and processes in water treatment and water distribution. At the end of the course students will be fully prepared to write the OIT certification examination of the Ontario Ministry of Environment.																								
Total Credits:	4																								
Hours/Week:	4																								
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Prerequisites:	There are no pre-requisites for this course.																								
Corequisites:	There are no co-requisites for this course.																								
General Education Themes:	Civic Life Science and Technology																								
Course Evaluation:	Passing Grade: 50%, D																								
Course Outcomes and Learning Objectives:	<table><tr><td>Course Outcome 1</td><td>Learning Objectives for Course Outcome 1</td></tr><tr><td>Units And Math</td><td>-Standards of measure and units conversions.</td></tr><tr><td>Course Outcome 2</td><td>Learning Objectives for Course Outcome 2</td></tr><tr><td>Basic Hydraulics</td><td>-Apply the principles of hydraulics to find flow rates, pressures and pumping head and power.</td></tr><tr><td>Course Outcome 3</td><td>Learning Objectives for Course Outcome 3</td></tr><tr><td>Electricity</td><td>-Define electrical terms: current, emf, and resistance and describe the relation between them.</td></tr><tr><td>Course Outcome 4</td><td>Learning Objectives for Course Outcome 4</td></tr><tr><td>Chemistry Basics</td><td>-Define chemistry terms. -Understand chemical interactions.</td></tr><tr><td>Course Outcome 5</td><td>Learning Objectives for Course Outcome 5</td></tr><tr><td>Water Quality and Sampling</td><td>-Identify the basic principles of and recognize the importance of disinfection of water.</td></tr><tr><td>Course Outcome 6</td><td>Learning Objectives for Course Outcome 6</td></tr><tr><td>Support Systems</td><td>-Explain the processes and equipment employed in water</td></tr></table>	Course Outcome 1	Learning Objectives for Course Outcome 1	Units And Math	-Standards of measure and units conversions.	Course Outcome 2	Learning Objectives for Course Outcome 2	Basic Hydraulics	-Apply the principles of hydraulics to find flow rates, pressures and pumping head and power.	Course Outcome 3	Learning Objectives for Course Outcome 3	Electricity	-Define electrical terms: current, emf, and resistance and describe the relation between them.	Course Outcome 4	Learning Objectives for Course Outcome 4	Chemistry Basics	-Define chemistry terms. -Understand chemical interactions.	Course Outcome 5	Learning Objectives for Course Outcome 5	Water Quality and Sampling	-Identify the basic principles of and recognize the importance of disinfection of water.	Course Outcome 6	Learning Objectives for Course Outcome 6	Support Systems	-Explain the processes and equipment employed in water
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		distribution systems.
	Course Outcome 7	Learning Objectives for Course Outcome 7
	Safety	-Describe the basic principles of safety as applied to water operations.
	Course Outcome 8	Learning Objectives for Course Outcome 8
	Legislation	-Explain and describe drinking water regulations.
	Course Outcome 9	Learning Objectives for Course Outcome 9
	Water Treatment	-Describe the main processes and operations employed in water treatment.
	Course Outcome 10	Learning Objectives for Course Outcome 10
Water Distribution	-Explain the processes and equipment employed in water distribution systems.	

Evaluation Process and Grading System:	Evaluation Type	Evaluation Weight
	Final Test	40%
	Term tests 3	60%

Date:	March 9, 2020
Addendum:	Please refer to the course outline addendum on the Learning Management System for further information.

