



COURSE OUTLINE: OEL860 - WASTEWATER OIT-PREP

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

Course Code: Title	OEL860: WASTEWATER OPERATOR-TRAINING CERT PREP
Program Number: Name	
Department:	DISTANCE EDUCATION
Semesters/Terms:	20S, 20F, 21W
Course Description:	This course is intended to provide the students with basics as related to the operation of wastewater collection and treatment systems. The basics as related to topics including: conversions, math, chemistry, hydraulics, electricity will be discussed first. It will be followed by topics on support systems mainly pertaining to pumps and motors and processes in wastewater collection and wastewater treatment. At the end of the course students will be fully prepared to write the operator in training certification examination of the Ontario Ministry of Environment.
Total Credits:	4
Hours/Week:	4
Total Hours:	60
Prerequisites:	There are no pre-requisites for this course.
Corequisites:	There are no co-requisites for this course.
Course Evaluation:	Passing Grade: 50%, D

Course Outcomes and Learning Objectives:	Course Outcome 1	Learning Objectives for Course Outcome 1
	Standards of measure and units conversions	-Units And Math
	Course Outcome 2	Learning Objectives for Course Outcome 2
	Explain and describe water regulations	-Legislation
	Course Outcome 3	Learning Objectives for Course Outcome 3
	Make area and volume calculations as related to wastewater operations.	-Basic Hydraulics
	Course Outcome 4	Learning Objectives for Course Outcome 4
	Apply the principles of hydraulics to find flow rates, pressures and pumping head and power	-Basic Hydraulics -Electricity
	Course Outcome 5	Learning Objectives for Course Outcome 5
	Identify the basic principles of chemistry	-Chemistry Basics
	Course Outcome 6	Learning Objectives for Course Outcome 6
	Define electrical terms:	

	current, emf, and resistance and describe the relation between them	-Electricity				
	<b>Course Outcome 7</b>	<b>Learning Objectives for Course Outcome 7</b>				
	Describe the parameters of water quality and sampling for compliance and process control	-Water Quality and Sampling				
	<b>Course Outcome 8</b>	<b>Learning Objectives for Course Outcome 8</b>				
	Describe the basic principles of safety in wastewater operations	-Safety				
	<b>Course Outcome 9</b>	<b>Learning Objectives for Course Outcome 9</b>				
	Describe the main processes and operations employed in wastewater collection	-Legislation -Wastewater Collection -Support Systems				
	<b>Course Outcome 10</b>	<b>Learning Objectives for Course Outcome 10</b>				
	Explain the processes and equipment employed in wastewater treatment systems.	-Wastewater Treatment				
<b>Evaluation Process and Grading System:</b>	<table><tr><td><b>Evaluation Type</b></td><td><b>Evaluation Weight</b></td></tr><tr><td>TESTS (4)</td><td>100%</td></tr></table>		<b>Evaluation Type</b>	<b>Evaluation Weight</b>	TESTS (4)	100%
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TESTS (4)	100%					
<b>Date:</b>	March 9, 2020					
<b>Addendum:</b>	Please refer to the course outline addendum on the Learning Management System for further information.					

