

Topics & Time Allocation (mins)	Wastewater Treatment Basic Math	Wastewater Treatment Math & Theory Review	Wastewater Treatment Fundamentals 1 Liquid Treatment - Introduction	Wastewater Treatment Fundamentals 1 Liquid Treatment - Wastewater Characteristics
Quiz	20	75	65	19
Introduction	1.5	1.5	33.5	2.5
Purpose				
Wastewater Math		44		
Wastewater Theory		45		
Design				
Dimensional Analysis	6			
Box Method	16			
Measurements	37			
Exponents	2			
Square Root	7			
General Math		8		
Chemistry & Biology		22		
Hydraulics & Power		20		
Regulations			30	
Liquid Treatment			45	
Solids Management			32	
Sources				14
Flow Variations				24
Influent				28
Per Capita Generation				18
Screening				
Grit Removal				
Septage Management				
Clarifiers				
Gates & Valves				
Process Variables & Control				
Operations				
Maintenance & Troubleshooting				
Records & Safety				
Microbiology				
Bacteria				
Microbial Growth Rates				
Sampling & Analysis				
Equipment				
Nitrogen				
Phosphorus				
Nitrification				
De-nitrification				
Chemicals				
EBPR				

Thickening  
Digestion



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Minutes	89.5	215.5	205.5	105.5
Hours	1.49	3.59	3.43	1.76

Wastewater Treatment Fundamentals 1 Liquid Treatment - Preliminary Treatment	Wastewater Treatment Fundamentals 1 Liquid Treatment - Primary Treatment	Wastewater Treatment Fundamentals 1 Liquid Treatment - Biological Treatment	Wastewater Treatment Fundamentals 1 Liquid Treatment - Waste Treatment Ponds	Wastewater Treatment Fundamentals 1 Liquid Treatment - Fixed Film Treatment	Wastewater Treatment Fundamentals 1 Liquid Treatment - Activated Sludge Process
55	99	45	77	120	191
16	9	4	6	8	9
	6		12	4	18
8					
	10		44	28	24
	12		16	48	26
			22		
				6	
62					
46					
26					
	48				40
	6				
	66		50	82	134
	10			44	
	28		58	38	
2	4		4	2	
		58		8	
		28		6	
		30		2	
			22	4	
			36	68	72



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215	298	165	347	468	514
3.58	4.97	2.75	5.78	7.80	8.57

Wastewater Treatment Fundamentals 1	Wastewater Treatment Fundamentals 1	Wastewater Treatment Solids Process Review
Liquid Treatment - Nutrient Removal	Liquid Treatment - Disinfection	

93	163	33
3	12	2
6	10	3
		38
	68	
	20	
14	20	
		22
12	38	
	12	
	38	
	22	
	168	
16		
12		
56		
44		
56		
28		

		16
		54
340	571	168
5.67	9.52	2.80