

CE 321, Fall 2015 Weekly Schedule (subject to change as necessary)

Week	Class topic(s)	Text Section(s)	Lab	Poster Project
1 (8/31 - 9/4)	Scope of course The watershed framework Fundamentals: dimensions and units, mass balances	1.1-1.6 7.1 4.3	Tour of Bushkill Creek Watershed *SATURDAY 9/5*	Fri all-class lunch mtg Hugel 103
2 (9/7 - 9/11)	Hydrology and watersheds Ecosystems	7.2 5.1	Watersheds and point/non-point source pollution (Lab)	
3 (9/14 - 9/18)	Ecosystems and Energy: Carbon & Nutrient cycles Food chains and Bioaccumulation	5.1-5.4	Stream assessment using macroinvertebrates at Jacobsburg Environmental Education Center	Mon - submit group names and topic choice
4 (9/21 - 9/25)	Chemistry and Water Quality: units, stoichiometry Chemical equilibria, pH, acid/base reactions Carbonate system	2	Coliform testing of Bushkill Creek samples (Lab)	Fri all-class lunch mtg Hugel 103 1-page proj summary due!
5 (9/28 - 10/2)	Chemistry and Water Quality: Multiphase reactions/adsorption Point and non-point sources Types of pollutants	9	Comprehensive assessment of Bushkill water quality	
6 (10/5 - 10/9)	DO & BOD, Streeter-Phelps Solids, inorganics, nutrients, bacteria Emerging contaminants	9	Movie Time - Silent Spring & Blind Spots	
Wed 10/7	On-campus lecture by Rachel Carson Council Pres. Robert Musil - 7:00-8:00 PM			
Thurs 10/8	Evening Exam 1 - 7:00-9:00PM (mass balances, hydrology, ecosystems, env chemistry)			

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7 (10/12 - 10/16)	- Fall Break (Mon & Tues) - Endocrine-disrupting compounds Water sources: Surface and Groundwater Treatment systems	9, 10	NO LAB	
8 (10/19 - 10/23)	Water supply and treatment 1: Coagulation and flocculation Sedimentation and filtration	10	Poster Project Meetings	Sun 10/25: Draft poster due
9 (10/26 - 10/30)	Water supply and treatment 2: Disinfection Softening	10	Field trip to Easton water treatment plant	Defense of Draft mtgs
10 (11/2 - 11/6) NO CLASS FRI!	Wastewater treatment Primary and secondary treatment Nitrogen and phosphorous removal Solids handling	11	Field trip to Easton wastewater treatment plant	
11 (11/9 - 11/13)	Solid waste disposal: History and regulation Landfill design and operation	13	Field trip to Waste Management Grand Central Landfill	Fri: Poster title and 1-page summary due
Thurs 11/12	Evening Exam 2 - 7:00-9:00PM (water quality, water treatment, and wastewater treatment)			

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12 (11/16 - 11/20)	Landfill groundwater monitoring Alternatives to waste disposal: waste minimization, recycling, etc.	13, 7.4, 9.7	Darcy's Law experiment (Lab)	
13 (11/23 - 11/27)	Waste recycling - Thanksgiving Break (Wed-Fri) -		NO LAB	Sun 11/29: Final Poster due
14 (11/30 - 12/4)	Hazardous Waste Management RCRA & Superfund Risk Assessment	14, 6	Movie Time - <i>A Civil Action</i>	Fri all-class lunch mtg Hugel 103
15 (12/7 - 12/11)	Groundwater pollution and remediation Environmental Site Assessment	7.3, 14.8, 9.7	Practice for poster session	
12/10	7:00-9:00PM Evening Poster Presentations in Farinon			
12/14	All-class lunch mtg Hugel 103 – Poster Awards			
	FINAL EXAM - as scheduled by Registrar			