

Hydrogeology (01:460:428)

Time & Place: Fall Semester, Odd Years, Wednesday, 3:20-6:20pm
Rm. 339, Wright Labs, Busch Campus

Instructor: Ying Fan Reinfelder (yingfan@eps.rutgers.edu)

Office Hour: (1) Mondays 1:00-3:00pm, Wednesdays 2:00-3:20pm or after class, Rm. 336, Wright Labs
(2) By Appointment

Required Text: Groundwater, by R.A. Freeze and J.A. Cherry, Prentice-Hall
<http://www.amazon.com/Groundwater-R-Allan-Freeze/dp/0133653129>

Structure: Lecture 3:20 – 5:00pm, Exercise/Homework 5:15 – 6:20pm
Homework due the following Wednesday
Exams are open book, open notes (no computers)
Final Exam covers material after Midterm only

Grading: 10 Homework Assignments = 50%
Midterm Exam = 25%
Final Exam = 25%

A	>= 93
B+	>= 86
B	>= 79
C+	>= 72
C	>= 65
D	>= 52

Schedule:

Week	Subject	Reading	Exercise - Homework
1	Groundwater in the hydrologic cycle; Darcy's Law and the hydraulic head	1, 4, 2.1-2.2	HW-1
2	Properties of porous media	2.3-2.5	HW-2
3	Properties of aquifers	2.7, 2.10	HW-3 (Lab)
4	Characterizing groundwater flow	5.1, 6.1	HW-4 (Lab)
5	Subsurface-surface water continuum	6.2, 6.5-6.8, Handouts	HW-5
6	Equations of groundwater flow; 1-D steady-state flow	2.11-2.12	HW-6
7	1-D steady-state flow; Midterm review	Handouts	
8	Midterm Exam		
9	Exam review, Flow to wells	8.3	
10	Boundaries and multiple wells	8.3	HW-7
11	Measuring aquifer properties	8.4-8.7	HW-8
12	Flow in unsaturated media	2.6, 6.4	HW-9
13	Friday Class		
14	Transport processes	2.13, 9.2	HW-10 (Lab)
15	Flow in fractured rocks; Final review	Handout	
16	Final Exam (12-3pm), scheduled by RU		

