## Assignment 9 PHGN361

## Homework due April 21

- 1. Read all of section 7.1, 7.2, 7.3.1, 7.3.2, and 7.3.3.
- 2. Medication is sometimes injected by putting a voltage on electrodes placed at each side of the body with the ionic medication on the inside of one electrode. Assume that the transport efficiency is  $10^{-3}$  of the charge delivered in such a circuit. Also assume that the body is made of salt water. Estimate from this simple model how long would it take to deliver  $10^{12}$  molecules of this medication with 12 volts applied to electrodes across the torso?
- 3. Chapter 7 problems 17, 18, 20, 26, 33, 37, 54