

**Assignment 6**  
**PHGN361**

**Homework due Feb. 22**

1. Chapter 4 problems 1 ( $10^8$  V,  
4 (force proportional to  $r^{-3}$ ),  
5 (torque proportional to the product of the dipole moments and  $r^{-3}$ ),  
9 (a. force proportional to  $r^{-3}$  and  $\vec{p} - 3\vec{p} \cdot \hat{r} \hat{r}$ ),  
10,  
11,  
14,  
15.