Reading Assignment for January 28
Sections 20.5 through 20.7

20.5 - Applications of Electric Fields

- Unsurprisingly, finding the field created by two or more point charges involves vector addition
- The field created by a large collection of charges, *i.e.*, a charge distribution is completely different than that of a point charge.
- The only example of a charge distribution that we'll use in this chapter (and next) is that of a parallel-plate capacitor.
- Parallel-Plate capacitor - two conductors, parallel to each other, that have been given an equal but opposite amount of of charge.
- Parallel plates create a uniform field - one that has the same direction and magnitude at every point.
- Electric field lines - used to give a picture of on electric field.

20.6 - Conductors and Electric Fields

- This section is nice in that there's not a really any math. It's all conceptual.
- Inside a conductor at electrostatic equilibrium the electric field must be zero.

20.7 - Forces and Torques in Electric Fields

- This section gives the equation that I introduced much earlier in lecture, $\overrightarrow{\mathbf{F}} = q\overrightarrow{\mathbf{E}}$.
- It also gives some nice examples about some real applications of electric fields in example 20.12.
- In electric fields, dipoles experience a torque $\Rightarrow$ they will rotate.

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