Lecture 7

Pre-Lecture Preparation (due within the first 5 minutes of class):

- Read pages 746 – 751 in the textbook (Serway 9th edition) and do the following:
  1) Quick Quizzes 25.1 – 25.2
  2) Book Objective Questions (p. 767): 4, 5
  3) Book Problems (p. 769): 1

Goals for the Lecture:

1) Understand that electric potential energy is related to the work done by the electric field as a particle moves in the field: $\Delta U = -q \int_A^B \vec{E} \cdot \overrightarrow{ds}$

2) Understand that electric potential is different than electric potential energy: $\Delta V = \frac{\Delta U}{q}$

3) Be able to calculate electric potential different (ΔV) from an electric field using $\Delta V = -\int_A^B \vec{E} \cdot \overrightarrow{ds}$

Post-Lecture Study Guide (I do not collect this):

Review the worksheets or other lecture material within 24 hours (preferably the same day as the lecture) to reinforce the ideas. Review the pre-lecture questions to make sure you understand them.

Do problems:

　　　　Ch 25: Conceptual Questions: 2

　　　　Ch 25: Objective Questions: 6

　　　　Ch 25: Problems: 2 and 5

　　　　Continue with the additional recommended study problems from chapter 25