Relavent Equations:
$$E = \frac{kq}{r^2}$$
$$\Delta V = -\vec{E}r$$
$$\Phi = \int \vec{E}\vec{A} = \frac{q_{enc}}{\epsilon_0}$$

Process:
First, I used Gauss' Law to try to determine the electric field with respect to the line charge density.

$$\Phi = \int \vec{E}\vec{A} = \frac{q_{enc}}{\epsilon_0}$$

For constant, E and A:

$$\Phi = EA = \frac{q_{enc}}{\epsilon_0}$$

Using a cylinder with radius, r and length L, for the Gaussian surface:

$$E * 2\pi rL = \frac{q_{enc}}{\epsilon_0}$$

To determine the enclosed charge:

$$q_{enc} = \lambda L$$

$$E * 2\pi rL = \frac{\lambda L}{\epsilon_0}$$
$$E = \frac{\lambda}{2\pi r\epsilon_0}$$

Now to determine the electric field with respect to voltage:

$$\Delta V = -\vec{E}r$$
$$\vec{E} = -\frac{\Delta V}{r}$$

Now bringing them together:

$$-\frac{\Delta V}{r} = \frac{\lambda}{2\pi r\epsilon_0}$$
$$\lambda = -\frac{\Delta V * 2\pi r\epsilon_0}{r}$$
$$\lambda = -\Delta V * 2\pi\epsilon_0$$

So let's plug in the numbers now,

$$\lambda = -(3.9\ kV * \frac{1000\ V}{1\ kV}) * 2\pi(8.854 * 10^{-12}\ \frac{C^2}{N * m^2})$$

Let's make the units a little nicer to work with to help me conceptualize a bit,

$$\lambda = -3900V * 2\pi(8.854 * 10^{-12}\ \frac{C^2}{N * m^2})$$
$$\lambda = -3900\frac{N * m}{C} * 2\pi(8.854 * 10^{-12}\ \frac{C^2}{N * m^2})$$
$$\lambda = 2.17E - 7\ \frac{C}{m} * \frac{1E9\ nC}{1\ C} = -216.96\ \frac{nC}{m}$$

But that's not right according to the homework software I'm using, so I'm not exactly sure where I made my mistake. I know that the diameter and distance don't show up at all in the final equation which seems strange but I don't know how to incorporate them into the final equation because the final units match up with what we would expect for line charge density.