PHY 4241/5227 : Advanced Dynamics, Spring 2007

March 26^{th}, 2007

Assignment # 10

(due Friday March 30^{th}, 2007, at the beginning of class)

1. As a simple preamble to the **Special Theory of Relativity**, consider an electron moving along the axis of a parallel plate capacitor that provides a constant electric field of magnitude $E = 10^6$ V/m. Compute how long will it take for this electron to reach the speed of light if it obeys Newton's 2nd law of motion.

2. Problem 12.18 of Griffith's book.