List of known corrections to the PHY 232C online lectures

Chapter 16: Electric Potential

Example: Motion in Field and Approaching Plate, slide 3, time~8:40
After: $-5 \times 10^{-4} v_y^2 + 10^{-4} = 0$

This is incorrect: ~~$v_y = \sqrt{4 \times 10^{-4}} = 0.02 m/s$~~

This is correct: $v_y = \sqrt{\frac{1}{5}} = 0.447\ m/s$

Chapter 17A: Current and Resistance

Example: Drift velocity, slide 2
The value of the drift velocity shown on this slide is incorrect. The correct drift velocity for this example is $7.39 \cdot 10^{-5}$ m/s = 0.266 m/hour

Chapter 18: Magnetic Fields

Example: Magnetic Fields by Wires, slide 3 first part
The result for the magnetic field strength is incorrect. The correct magnetic field strength at the coil's center is $B = 5.0 \times 10^{-2}$ T

Chapter 19B: AC Circuits

Example: Self Inductance RL Circuits, slide 1
The result for the inductance of the solenoid is incorrect. The correct inductance of the solenoid is $L = 1.26 \times 10^{-3}$ H

Chapter 19B: AC Circuits Example: LRC Circuits/Resonance, slide 2 @ 2min 20 sec.
Incorrectly states the resonance frequency does not depend on L or C.
CORRECTION: The resonance frequency only depends on L and C, therefore if either V_{max} or R are changed, the resonance frequency will remain the same.

Chapter 21A: Ray Optics

Example: Lenses, slide 6 two lenses
The text of the problem incorrectly refers to the first optical element as a converging mirror. This element should be a converging lens.

Chapter 24: Atomic Physics

28.1b: Bohr's theory for hydrogen, slide 6
This slide has an incorrect value for the Bohr radius, a_0. The correct Bohr radius is:

$$a_0 = 0.0529 \times 10^{-9}\ m$$