### Status and Announcements for PHYS2350 EV1

Updated September 1, 2017

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### SUMMARY: Lecture 1, August 24

The sections covered were 3-1, 3-3, and 3-4. The topics covered were: definition of vectors, magnitude/direction and component form of vectors, converting between forms of vectors, vector addition/subtraction by component, scaling of vectors by component, and vector multiplication (dot and cross product), which is not covered in the textbook. Section 3-2, on geometric addition/subtraction of vectors, was not covered in class but needs to be read. The lecture finished with the introduction of the position/displacement/distance and velocity/speed, which starts chapter 2.

In class, I stated that geometric addition/subtraction of vectors was covered in section 3-4, which needed to be reviewed at home. **This was incorrect**; it is actually covered in section 3-2.

# **UPDATE:** Syllabus

On the original syllabus, **chapter 12**, **sound**, **was omitted**. This chapter **will be covered** in the course, on the same day as oscillations & waves (November 2). This has been corrected on the website and is being corrected on the official syllabus.

# **UPDATE:** MasteringPhysics

The course homework is now available on MasteringPhysics. The course code is:

#### MPLAURENCE35078

## SUMMARY: Lecture 2, August 31

We finished chapter 2, on 1-dimensional kinematics, and covered most of projectile motion from chapter 3. Important things to note were the three essential kinematic equations,

$$\Delta x = v_0 t + \frac{1}{2} a t^2$$
  $v = v_0 + a t$   $v^2 = v_0^2 + 2a \Delta x$ 

that kinematics only applies to constant acceleration, the x- and y-coordinate motions in 2-dimensional motions are independent of one another, and that  $a_x = 0$  and  $a_y = -g$  in projectile motion.

In the next lecture, we will cover problems in projectile motion and finish chapter 3 with a bit of work on reference frames and relative motion.

## **UPDATE:** MasteringPhysics

As stated in class, the due date for the **homework on vectors was moved to Tuesday**, **9/5**. The homework for 1-dimensional and 2-dimensional kinematics is still due Sunday, 9/10, and I do not expect to give any extra time for those assignments, so make sure to budget your time well.