Status and Announcements for PHYS2350 EV1

Updated September 7, 2017

Prof. Douglas H. Laurence

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.

UPDATE: Hurricane Irma

Class has been **cancelled** on Thursday, September 7. Because of this, the exam on September 11 has been **postponed**, and the homework for 1d and 2d motion has been extended to Thursday, September 11.