Status and Announcements for PHYS2350 EV1

Updated September 22, 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,

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

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 14 has been **postponed**, and the homework for 1d and 2d motion has been extended to Thursday, September 14.

UPDATE: Course Schedule Adjustments

Due to the cancelled class on September 7, exam 1 has been postponed to September 21. The exam **will not take the entire class time**; it will only be for 1 hour and 15 minutes. After the exam time is up, we will spend the remaining 1 hour and 15 minutes resuming the lecture material, which will be the start of circular motion & gravity (chapter 5).

UPDADTE: Course Schedule Adjustments

Now that we are back in class after Hurricane Irma, I have adjusted the syllabus on the website to reflect the changes to our course schedule in order for us to finish the material. As of right now, there is no word that the departmental final exam is going to be changed, meaning we still have to cover all of the material. This means that there will be an hour to an hour and a half of lecture needed during each laboratory session.

SUMMARY: Lecture 3, September 21

We covered chapter 4 in its entirety, though there wasn't enough time to do any practice problems with inclined planes. Those will be done during the review for the exam on Tuesday, September 26. The important things to understand from this lecture are: Newton's laws; how to construct free body diagrams; how to solve Newton's second law; friction; and how to solve problems on inclined planes.