

## VLA Physics: Syllabus for February 15,2021 - February 26, 2021

### Unit 3: [1-Dimensional Motion]

#### Unit Standards:

- **1-Dimensional Motion 1** - I can use mathematical models to solve physics problems involving 1-D motion and I can distinguish between vector and scalar quantities in 1-D motion to solve problems appropriately (e.g., the difference distance and displacement, average speed and average velocity)
- **1-Dimensional Motion Standard 2** - I can draw and interpret motion graphs (position, velocity, acceleration), motion maps, mathematical models, and verbal or written descriptions to represent the motions of constant velocity or accelerating objects, and to determine the correct model of motion (constant velocity, constant acceleration, uniform circular motion, etc.)
- **1-Dimensional Motion Standard 3** - I can explain the meaning of slope (changing or constant), area and y-intercept as needed for kinematics graphs representing constant speed or accelerated motion, as well as other types of graphs that come up during the course.

| Daily schedule | VLA cohort   |
|----------------|--|
| Friday, 2/12   | <b>Virtual</b> - Activity - Matching car or buggy videos to the Stacks of Kinematics Curves graphs. Complete this by <b>Monday, 2/15 at 11:59 PM</b> .<br><br>Complete the weekly check-in form by <b>today at 3:00 PM</b> . |

**We will have a quiz/test over linear motion during the school day Thursday, 2/25**

| Daily schedule | VLA cohort   |
|----------------|--|
| Monday, 2/15   | <b>President's Day</b> - Your assignment from last week ( <a href="#">matching kinematics curves with graphs</a> ) is due to be submitted <b>today by 11:59 PM</b> .   |
| Tuesday, 2/16  | <b>Virtual</b> - Attempt all problems (and upload your work) for the <a href="#">Linear Motion notebook problems</a> by <b>Wednesday, 2/17 at 11:59 PM</b> .   |
| Weds., 2/17    | <b>Virtual</b> - Complete the <a href="#">1-Dimensional TIPERs</a> (I've done one as an example) by <b>Friday at 11:59 PM</b> .  |
| Thursday, 2/18 | <b>Virtual</b> - Come to the Google Meet where we will go over the notebook problems due yesterday. You should listen to my Screencast of solutions / PDF if we don't get to go over the ones you want. Complete the <a href="#">multiple representations of motions assignment</a> . Upload this by <b>11:59 PM on Sunday</b> . |
| Friday, 2/19   | <b>Virtual</b> - Work on the skier avalanche problem (due <b>Monday at 11:59 PM</b> ). Complete the weekly check-in form by <b>today at 3:00 PM</b> .  |

| Daily schedule | VLA cohort   |
|----------------|--|
| Monday, 2/22   | <b>Virtual</b> - Come to the Google Meet today to go over completed work (TIPERs and multiple representations of motion).<br>Complete the Skier/Avalanche problem and submit by <b>tonight at 11:59 PM</b> .   |
| Tuesday, 2/23  | <b>Virtual</b> - Make a FlipGrid video TODAY demonstrating your understanding of 1-D motion (the prompt will be given within the assignment). This should be made and submitted by <b>TODAY at 11:59 PM</b> so I can get you feedback before your test on Thursday.  |
| Weds., 2/24    | <b>Virtual</b> - Today will be able to be used as a study day for tomorrow's test. If you have questions, I'll make 2-3 PM available as an office hour, or you can always send me a Remind message. Things to study/look over: <ul style="list-style-type: none"> <li>● Buggy lab and speeding up/slowing down lab</li> <li>● Stacks of kinematics curves</li> <li>● TIPERs</li> <li>● Physics Classroom HW problems and solutions</li> <li>● Skier/avalanche problem and multiple representations of motion</li> <li>● CV WS #1 and #2, although these should be easy by now</li> </ul> |
| Thursday, 2/25 | <b>Virtual</b> - <b>TEST (or QUIZ)</b> on 1-D motion, both accelerated and constant motion. This will be a Google Doc that can be opened at 8:00 AM and is due at 3:00 PM. I'll be available from 2:00 to 3:00 PM on a Google Meet if you have questions.  |
| Friday, 2/26   | <b>Virtual</b> - Probably no office hours today (teachers are getting their vaccines today 🙌, so I'm not sure when I'll be available).<br>Read <i>The Physics Classroom</i> tutorial Motion and Forces in 2 Dimensions, Lesson 2 (Projectiles) parts (a), (b), (c), (d) and (f). Complete the Google Form quiz <b>by 1:50 PM on Monday, 3/1</b> so we can go over this at the Google Meet.<br>Complete the weekly check-in form by <b>today at 3:00 PM</b> .   |

*VLA PHYSICS 2/15 to 2/26*

**March is here! Spring is coming!**