

VLA Physics: Syllabus for March 1, 2021 - March 12, 2021

Unit 4: [2-Dimensional Motion]

Target Standards:

- **2-D Motion and Gravitation 1** - I can explain the horizontal and vertical motion of a projectile using constant velocity and constant acceleration models and solve mathematical problems involving projectile motion using 1-D motion concepts in numerous ways learned earlier in the course, including mathematically, graphically, with motion maps, and through descriptions. I can demonstrate the independence of horizontal and vertical motion for projectiles.
- **2-D Motion and Gravitation 2** - I can identify what factors affect the amount of torque on an object, and use proportional reasoning to solve problems involving torque and forces. ($T = F \times d$)
- **2-D Motion and Gravitation 3** - I can correctly use and apply Newton's Law of Universal Gravitation mathematically, and conceptually to predict how gravitational forces change as positions and masses of objects change

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

Friday, 2/26	<p>Virtual - Probably no office hours today (teachers are getting their vaccines today 🙌, so I'm not sure when I'll be available). No weekly check-in, but fill out the Performance Rubric today by 3 PM. That's our quarterly evaluation.</p> <p>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 by 1:50 PM on Monday, 3/1 so we can go over this at the Google Meet.</p>
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Daily schedule	VLA cohort
Monday, 3/1	<p>Virtual - Complete the reading quiz assigned last week by 1:45 PM today.</p> <p>If you have questions about your tests, or want to see a key, let me know!</p> <p>Discuss the major aspects of 2-D (projectile) motion at the Google Meet. No new equations!</p> <p>Discuss a bit about where we are headed in VLA and scheduling questions for juniors. Topics include: 2-D motion, Energy, Electrostatics & Circuits, final independent project</p>
Tuesday, 3/2	<p>Virtual - Complete the Free Fall Concept Builder on Physics Classroom (all three parts) by Friday, 3/5 at 11:59 PM.</p>
Weds., 3/3	<p>Virtual - Watch the video and read the article and answer the first prompt for the Interactive Online Assignment relating to Creativity In Science. Post your response on the Google Classroom Stream by Sunday, 3/7 at 11:00 PM so we can discuss this later during our Google Meet on Monday. There will be two other prompts related to this assignment at some point.</p>
Thursday, 3/4	<p>Virtual - Complete the Projectile Simulator Activity on Physics Classroom (Interactives, not a Concept Builder) by Monday, 3/8 at 11:59 PM. We'll go over this a bit today at the Google Meet.</p>
Friday, 3/5	<p>Virtual - Complete the week's assignments (Concept Builders, Interactive Online Assignment, and Projectile Simulator activity. Fill out the weekly check-in form by 3:00 PM today.</p>

Daily schedule	VLA cohort
Monday, 3/8	Virtual - Discussion of the <i>Interactive Online Activity</i> during the Google Meet Answer any questions about the Projectile Simulator and complete by tonight at 11:59 PM
Tuesday, 3/9	Virtual - Watch my EdPuzzle on Solving Projectile Problems and answer the questions by Wednesday, 3/10 at 11:59 PM so we can discuss this at Thursday's Google Meet.
Weds., 3/10	Virtual - Attempt the Projectile Motion notebook problems from Physics Classroom and upload your work these by Friday at 11:59 PM .
Thursday, 3/11	Virtual - Go over the EdPuzzle and projectile motion problems solving at the Google Meet. Respond to the second prompt in the Google Classroom Stream related to the <i>Interactive Online Assignment</i> , and respond to others' comments as well. Document the dates of your responses in the thread. Post your response on the Google Classroom Stream by Sunday, 3/14 at 11:59 PM . There will be one other prompt related to this assignment.
Friday, 3/12	Virtual - Completing the Projectile Motion notebooks problems and the response to the <i>Interactive Online Activity</i> prompt. Fill out the weekly check-in form by 3:00 PM today .

March is here! Spring is coming!