

VLA Physics: Syllabus for March 15,2021 - March 26, 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

| Daily schedule | VLA cohort |
|-------------------------------|---|
| Monday, 3/15 | Virtual - Go over the projectile motion HW at the Google Meet Introduce TIPERs at the Google Meet. Complete the TIPERs on Kami (or print them out and upload clear pictures) by 11:59 PM on Wednesday, 3/17. |
| Tuesday, 3/16 | Virtual - Finish the TIPERs that you started yesterday |
| Weds., 3/17 St. Patrick's! | Virtual - Respond to the third and final prompt 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, 3/21 at 11:59 PM . You should have at least four total posts spread over time for this assignment, and complete any final post by Wednesday, March 24 . |
| Thursday, 3/18 | Virtual - We'll go over the TIPERs at the Google Meet today, and I'll also introduce the lab for the Video Analysis/Video Physics. |
| Friday, 3/19 | Virtual - Work on the lab for Video Physics today. This will be due at 11:59 PM on Monday, 3/22 . |

| Daily schedule | VLA cohort |
|----------------|--|
| Monday, 3/22 | Virtual - Come to the Google Meet where you can ask questions about the Video physics lab before you turn it in tonight. Also, we'll discuss the upcoming quiz and what's next (torque). |
| Tuesday, 3/23 | Virtual - Finish any last comments and posts on the Interactive Online Assignment and 'turn in' by 11:59 PM on Wednesday, 3/24 . Study for your quiz! |
| Weds., 3/24 | Virtual - QUIZ (only on Projectile Motion) → Quiz will be short, and open from 8:00 AM until 3:00 PM today. EdPuzzle on torque. Watch and complete it by Thursday, 3/25 at 11:59 PM . |
| Thursday, 3/25 | Virtual - Come to the Google Meet where we'll go over your quizzes and I'll give you a preview of the Balancing Act activity. This will be due at 11:59 PM on Friday, 3/26 . That way we'll have a clean slate with nothing to worry about over break. |
| Friday, 3/26 | Virtual - Work on/complete the Balancing Act activity using Kami. I hope you have a nice spring break! No Google Meet office hour today. |

I hope everyone has a great spring break and Easter!

