

# Physics in the Universe with Ryan Reidy

Students:

The goal of your at home learning will be to increase understanding and problem solving ability for everything we've done so far this semester. Every other day starting on 19 MAR 2020, you need to check **Classroom**. I will post an agenda and the documents that you need for that class. You are expected to complete the work by the due dates indicated below.

Positive credit: If students make revisions or complete cw/hw assignments that were due prior to shut down OR if they do AHL we input those scores to positively improve the grades. If work is not completed at this time it has no impact on your grades. This will be most important for students that need to improve grades. This will also be important content and skill development for being ready to return to classroom based learning.

ANY Late, completed or revised work from Second Semester is due by 02 APR 2020.

## Student Objectives

- Learn about the science and math of contagious diseases
- Finish what was going on in the last class
- Review for unit and final exams
- Extend learning on topics already introduced
- Improve grades (revision, late work)

Day	Agenda
<b>Day One: Thursday, March 19th</b>	<b>Topic: Waves 1</b> <ol style="list-style-type: none"><li>1. Read the following webpages, answer the Check Your Understanding questions on a google doc and complete the Slinky lab Activity on the same google doc; either write the question and answer or the answer with question context. I will post a presentation that is almost identical to mine for students that were absent or unable to focus on the last day. <a href="https://www.physicsclassroom.com/class/waves/Lesson-1/What-is-a-Wave">https://www.physicsclassroom.com/class/waves/Lesson-1/What-is-a-Wave</a> &amp; <a href="https://www.physicsclassroom.com/class/waves/Lesson-1/Categories-of-Waves">https://www.physicsclassroom.com/class/waves/Lesson-1/Categories-of-Waves</a> <a href="https://www.physicsclassroom.com/class/waves/Lesson-2/Frequency-and-Period-of-a-Wave">https://www.physicsclassroom.com/class/waves/Lesson-2/Frequency-and-Period-of-a-Wave</a></li></ol> <p>HW due from last day of class; transfer your answer from your science notebook onto the Waves 1 google doc 1) calc the wavelength of a wave on a spring moving at 0.2 m/s and a frequency of 0.5 Hz. 2) The microwaves produced inside a microwave oven have a wavelength of 12.0 cm and a frequency of 2,500,000,000 Hz. At what speed do the</p>

	<p>microwaves travel in m/s? 3) Water waves on a lake travel toward a dock with a speed of 2.0 m/s and a wavelength of 0.5 m. How many wave crests strike the dock each second? <i>If you were absent the last day of class, this assignment can be turned in on 23 MAR,</i></p> <p><b>Due:</b> by 3 PM 23 MAR, 20 pt cw/hw</p>
<p><b>Day Two:</b> <b>Monday, March 23rd</b></p>	<p><b>Topic: Waves 2</b></p> <p>1. Read the following page, answer the Check Your Understanding questions on a google doc and complete the Simple Wave Simulator Activity on the same google doc; either write the question and answer or the answer with question context</p> <p><a href="https://www.physicsclassroom.com/class/waves/Lesson-2/The-Anatomy-of-a-Wave">https://www.physicsclassroom.com/class/waves/Lesson-2/The-Anatomy-of-a-Wave</a>  <a href="https://www.physicsclassroom.com/class/waves/Lesson-2/Energy-Transport-and-the-Amplitude-of-a-Wave">https://www.physicsclassroom.com/class/waves/Lesson-2/Energy-Transport-and-the-Amplitude-of-a-Wave</a>  <a href="https://www.physicsclassroom.com/class/waves/Lesson-2/The-Speed-of-a-Wave">https://www.physicsclassroom.com/class/waves/Lesson-2/The-Speed-of-a-Wave</a>  <a href="https://www.physicsclassroom.com/class/waves/Lesson-2/The-Wave-Equation">https://www.physicsclassroom.com/class/waves/Lesson-2/The-Wave-Equation</a></p> <p><b>Due:</b> by 3 PM on 25 MAR, 10 pt cw/hw</p>
<p><b>Day Three:</b> <b>Wednesday, March 25th</b></p>	<p><b>Topic: Waves 3</b></p> <p>1. Earth Science textbook read p 495-498, take notes on stress, strain and faults, I first asked you to sketch diagram this talking about relative age dating folds and faults. Read <a href="#">How Earthquakes Work</a> and <a href="#">How to Survive a Tsunami</a>. I will post Questions to Google Class to answer based on these readings</p> <p><b>Due:</b> Due by 3 PM on 27 MAR, 10 pt cw/hw</p>
<p><b>Day Four:</b> <b>Friday, March 27th</b></p>	<p><b>Topic: Waves 4</b></p> <p>1. <a href="#">Practice problems</a> with wave speed formula</p> <p><b>Due:</b> Due by 3 PM on 31 MAR, 10 pt cw/hw</p>
<p><b>Day Five:</b> <b>Tuesday, March 31st</b></p>	<p><b>Topic:</b> Science LA task COVID-19 CER View the <a href="#">COVID -19 Slide presentation</a></p> <p>i. added video link <a href="https://www.youtube.com/watch?v=Fqw-9yMV0sl&amp;feature=youtu.be">https://www.youtube.com/watch?v=Fqw-9yMV0sl&amp;feature=youtu.be</a></p> <p>ii. Use the Question: How can you and your family protect yourselves from COVID-19?</p>

	<ul style="list-style-type: none"><li>iii. Create a claim that answers the question based on the Slide presentation</li><li>iv. Create an evidence section where you draw on facts and statistical information from the presentation.</li><li>v. Write a two paragraph Reasoning essay</li><li>vi. <a href="#">Rubric</a></li></ul> <p><b>Due:</b> 02 APR by 3 PM 20 assessment points,</p>
<b>Day Six: Thursday, April 2nd</b>	<p><b>Topic:</b> Have students individually look at CK12 resources, add new lings and annotate them for others, Make an ongoing shared list of <a href="#">Wave Study Session</a></p> <p><b>Due:</b> by 3PM 06 APR, 10 pt cw/hw</p>