

Mini Project Guidelines

The following guidelines have been compiled to assist you in preparing your mini project. Be creative and think outside of the box. This is an opportunity to exercise some creativity and have some fun. If you are looking for some good examples, I am fond of the [minute physics videos](#).

Purpose: The project is an opportunity student to present some phenomenon or observation in the “real world” and connect it to what we have been learning in class. Your idea does not have to be a physics problem, provided you can link it to ideas we have learned about in this course. Be creative, and feel free to ask me for help if you need it.

Caution, the purpose of these video is not to reteach class materials, but to see how concepts from the course apply to the real world. Don't try to explain a simple harmonic oscillator, rather tell me (for example) how the suspension of a car works and draw the connection to what we learned about simple harmonic oscillators.

Presentation: You will need to create a short video, showing what you have found, and provide a short explanation, and then connect it to some ideas we have learned about in class.

If you use a video from the internet, please remember to give credit to the original authors.

Time commitment: These videos require several steps require brainstorming, planning, researching, creating (acting/narrating and filming) and editing.

I would suggest that you should brainstorm individually before meeting as a group, that was the group meeting is simply choosing your favorite topic and assigning tasks.

If you work efficiently, it should take each group member about half an hour to create the video, but you should not spend more than one hour each.

Video Description: Underneath your video, please add a description including:

- A detailed description of each group members contribution.
- Any bibliographic information, especially if you used a video animation photo that you didn't create yourself.

Deadline: You will be required to submit three mini projects (_____, _____, _____). Your video will be submitted on _____.

Grading: I will grade each project over the following week based on this rubric.

Criteria	/10	Perfect	Passable	Poor
Link to topics covered in the course	/3	Video clearly highlights connections between your topic and ideas from this course.	Video overlooks or inaccurately presents connections between your topic and ideas from this course.	The topic is not linked to anything studied in this course.
Correct explanation of the physics	/3	Accurately explains the topic using ideas explored in this course (and possibly ideas from other science courses too).	Gives some anecdotal information about the science but doesn't show an understanding of the topic.	Missing or incorrect explanation of the science.
Oral presentation	/2	Video presents the topic in a clear and understandable way.	Video is difficult to understand and/or scientific terms are used incorrectly.	Explanation is not understandable.
Interesting /Creative	/1	Generates discussion with peers and/or it intrigues me.	Topic doesn't generate any discussion or reaction from peers and/or interest me.	Topic has already directly studied in class.
Group work	/1	Group worked collaboratively to create a coherent product.	Group distributed tasks, resulting in disconnected ideas.	The group was unable to work together effectively.