

To fulfill an oral assignment for Writing and Oral Communication requirements for this course, present your findings from the week 7 lab, Physics in Flash Games. In science, it is important to not only arrive at the correct answer, but also to be able to explain the process and results in a clear and concise manner. For those in their first year, this assignment must be uploaded to your e-portfolio on Brightspace (Desire2Learn). This document describes the requirements and evaluation of this assignment.

Presentation Due: 1st half of lab in week 9.

Length: 10-12 minutes for presentation, 2 minutes for questions.

Presentation Requirements:

This presentation is an oral discussion of your results from the in-class lab from week 7, “Physics in Flash Games”. Please see the experiment page and your written assignment for a description of the experiments you performed and guidelines for analysis/discussion.

All members of the group are required to present, with each group member speaking for approximately equal amounts of time. The use of computer slides (powerpoint, pdf or otherwise) is required. Demonstrating the game may not take more than 1 minute of the presentation.

The presentation will be graded on format, clarity and the speakers’ ability to convey the necessary information within the time allotted. Slides must include images/figures/tables and relevant text. After the presentation, the speakers will entertain questions from the audience for 1-2 minutes.

Warning: Avoid only reading the text off the slides.

Text on slide is meant to summarize or supplement what you are saying, not repeat it

Presentation Structure:

The order of presentation can be mixed and changed. Be sure to include some physics.

Introduce the Game:

Brief summary of the purpose of the game, how it is played.

Demonstrate the game, while providing a description of what is occurring.

Pictures will help. A history of the game is not required, but if included should be minimal.

Qualitative Observation (x2)

Discuss the qualitative observation including the situation in which you made it.

Describe what should physically happen in terms of the laws of physics.

Specifically state the law/concept (Ex: Define Newton’s I law),

Explain whether your observation(s) agree or disagree with the laws of physics.

Quantitative Observation/Calculations

Describe the experiment including what was measured and how it was measured.

Explain how the data was analyzed, including the scaling factor used, what physical theory was applied and show a sample calculations.

Quantitative Interpretation:

Explain whether the results agree/ disagree with the laws of physics (specifically state the law).

Show how your result(s) agree with real life by calculating a percent difference/error.

Be sure to include the source of the real life value.

Conclusion:

Summarize your results.

Explain whether the game designers take the laws of physics into account in their design

Does it matter and does it detract from the game?

Presentation Grade Breakdown:

The group's grade on each of these sections will be split evenly between my evaluation and the average evaluation from your peers.

5 % - Participation – Evaluator

You are asked to actively listen to others presentations and evaluate it appropriately.

If you evaluate everyone the same, you will not receive credit for participation.

If you do not provide “Positive Feedback” or “Constructive Criticism”, you will not receive credit either. Both conditions must be satisfied to earn the 5% designated.

20% - Format – Visual quality of the slides

Is the layout/design of the slides logical?

Are the images/figures/tables and text properly formatted?

Are there spelling errors/formatting issues?

Are references included? (where appropriate)

25% - Clarity/Group interaction – Explanation of material presented

Did the group stumble through their explanation?

Did the group interact well or was it an awkward interaction?

Do the slides enhance or detract from the presentation?

Did the group effectively address/answer questions?

50% - Content – The main part of the presentation

Is the game properly overviewed?

Did you properly explain the qualitative observations?

Was the physics used in these qualitative observations correct?

Was the quantitative experiment clearly described?

Was the physics associated with your analysis clearly explained?

Were a scale factor and calculation included?

Is the result clearly explained and compared to a real-life value?

Is the agreement or disagreement with the laws of physics clearly justified?

Does the correctness (or not) of the physics detract from the game?

Oral Presentation

Bad Physics in online flash games

Phy101: General Physics I

Ekey & Mitchell

Lab: Thursday AM

Thursday PM

Thursday Evening

Speakers: _____, _____, _____

Evaluator: _____

Use the following scale to rate the speakers.

If you evaluate everyone the same, you will not receive credit for participation.

1 = did not meet minimum expectations, generally muddled and unclear, did not happen

2 = adequate, met minimum expectations, but not well

3 = very good, left no doubts about quality

4 = excellent, crystal clear, done with flair

Format – *Visual quality of presentation*

Content – *The meat or tofu (if you are vegetarian)*

_____ Layout of Slides

_____ Overview of the game?

_____ Images/figures/text properly formatted

_____ Qualitative observations clearly explained

_____ Format, spelling and grammar

_____ Physics of qualitative obs. explained?

_____ Proper references (where appropriate)

_____ Quantitative (data) experiment explained

Clarity – *Explanation of material presented*

_____ Physics of quant/analysis clearly explained

_____ Delivery quality (no fillers or stumbles)

_____ Scale factor and calculated included

_____ Group interaction (good or awkward)

_____ Results explained and compared to real-life

_____ Slides support the explanation?

_____ Agreement/disagreement with physics justified

_____ Effectiveness of answering question(s)

_____ Discussion of physics necessary for the game

If you do not provide a comment for each below, you will not receive credit for participation.

Positive Feedback

Constructive Criticism