

Project 3 [6 FP “Fluency Points”]:

In a two-minute video, present a real-life 1-DOF free & damped vibration phenomenon via an experiment and theoretical analysis

Description:

In a video that lasts no longer than 120 seconds:

- Identify a 1-DOF free & damped vibration phenomenon in or around your house
- Explain the phenomenon and the vibration behavior by:
 - Conducting a simple experiment to
 - capture the motion of the vibrating object
 - visualize the vibration in a displacement vs time plot showing "log decrement"
 - estimate the stiffness (k) and damping coefficient (c)

and:

- Performing a theoretical analysis and visualizing the solution in a displacement vs time plot
- Compare the experimental and analytical results, and discuss sources of error, validity of your assumptions, etc.
- Reflect on your journey of working on this project

Deliverable:

Present your work in a video uploaded to YouTube, and submit your YouTube URL to Gradescope.

Rules and Formatting:

- This is an individual project, to be done by you and you alone
- Your video must be in landscape orientation (this is YouTube, not Tiktok...)
- Your video must be less than 120 seconds in duration
- You must show your face for the majority of the video
- You must voice narrate your presentation; simply showing written notes without narration is a violation of this rule
- Your video must be uploaded to YouTube, with the upload date coinciding with (or no later than) your URL submission date on Gradescope

Tips:

- Make it fun yet educational
- Shoot plenty of raw footage, then edit using a free software
- Speak close to the mic

- Avoid using copyrighted material (music, images and footage) to minimize the risk of infringement
- Make your YouTube video “unlisted”
- Test your YouTube link before submitting to Gradescope
- See below for how to upload videos to YouTube and how to submit URL in Gradescope

Submission:

Submit your Youtube URL in Gradescope only. Submissions by email or other means will be disregarded.

Due on Oct 11, 2021 (Monday), at 11:59 pm CST.

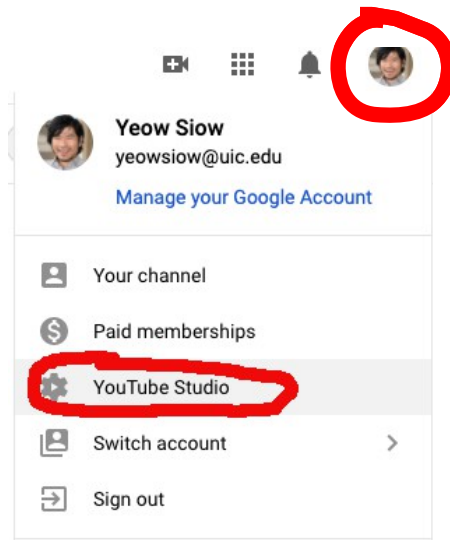
Late submissions will be subject to the “half-life” reduction policy according to the syllabus.

Grading Rubric:

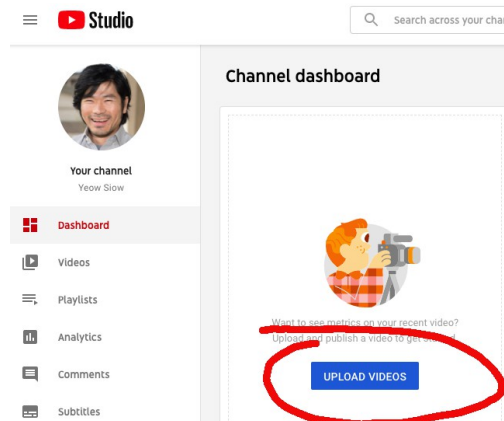
	Fluency			Scaling	Max Possible
	2	1	0		
Technical Rigor	Appropriate object is used to illustrate the vibration type; experiment is well constructed; observed data accurately collected and plotted; theoretical analysis is accurate	Some obvious details missing	Farfetched, or missing most details	1	2
Professionalism	Video has good quality visuals, clear audio, smooth "flow" and editing; educational and fun; a joy to watch	Some issues with visuals, audio, and/or production relevance	Can't make out most visuals, barely audible; or production unrelated to project topic	1	2
Rationale, Justification, Reflection	Thoughtful and authentic; a comparison of experiment and theory is clearly made; acknowledges limitations/inaccuracy and suggests future (self-)improvements	Insubstantial or vague	Missing altogether	1	2
Max Possible:					6

How to Upload Your Video to YouTube

1. Sign in to your YouTube account (using your UIC credentials).
2. Go to “YouTube Studio”:



3. Upload Videos:



4. Select your video file, enter your video title and description, and (optional) upload a thumbnail photo
5. Under “Visibility, select “**Unlisted**” as publishing type:

Visibility

Choose when to publish and who can see your video

Save or publish
Make your video public, unlisted, or private

Private
Only people you choose can watch your video

Unlisted
Anyone with the video link can watch your video

Public
Everyone can watch your video

Set as instant Premiere ?

How to Upload Your YouTube URL to Gradescope

1. Log in to Gradescope.
2. Select the project:

NAME	STATUS
Project [redacted]	● No Submission

3. Follow the instructions there. Nice and easy!

Project [redacted]

Q1 Youtube URL
[redacted]

Copy and paste your YouTube video URL here. Be sure to test the link first before submitting!

[Save Answer](#)

[Save All Answers](#) [Submit & View Submission >](#)