

Video Project #1

Topic Assigned: Monday, April 25 by 10:00am

Video Due: Friday, May 6 by 11:00pm

Video Project Overview:

The purpose of the Video Project is to create an explanation of a linear algebra concept or explain a classical linear algebra problem designed for a student at your level.

This is an opportunity for you to illustrate your knowledge of linear algebra in a less stressful (and hopefully more fun) environment than a test!

For ease in submission, we are asking students to upload their video to YouTube as an unlisted video and to submit a link to this video. (Details are given below.)

Video Project Timeline:

On **Monday, April 25** you will be assigned a randomly chosen probability topic. The topics chosen come from the following categories:

- a topic that has come up in course,
- a topic that is mentioned in your textbook,
- a classical/well-studied example in linear algebra.

Your video project will be due on **Friday, May 6 by 11:00pm**.

If you do not like your topic, or have one you are more excited about, you will have until **Friday, April 29th** at 5:00pm to submit a new topic **not on our list**.¹

As mentioned in class: Unless we specifically obtain your permission, your video will only be seen by course Instructors and TAs.

What is Required:

- 4 - 7 minute video on your topic.
- Your target audience is another undergraduate student in the course. Do not assume knowledge that would be outside the material of the course.
- Your video should have the following four components:
 1. Your video must begin by showing a slide (or other visual aid) and saying out loud each of the following: with your name, our course title (Math 141), your section number, the semester (Spring 2022) and your topic.

¹A new topic request must be emailed to both Instructors and your course TA. Your request must explain not only your topic but what example calculation you will perform. You will receive notice of topic decision by Tuesday, March 15th at 9:00am.

2. Your video must introduce your concept or idea in both plain language and mathematical language. Pretend you are creating something that could accompany a textbook.
 3. You must go through at least one example of calculation that illustrates the concept.
 4. You must talk about how the idea/topic relates to the world outside of Math 141. Does this come up in computer vision? Mathematical modeling? Economics? Chemistry?
- Your presentation must include visual aids. The easiest way to achieve this is to make slides and record yourself giving a slide show presentation on Zoom.
 - You can use **any references you like!** Your course textbook, other textbooks/online resources, other students in the course, Wikipedia, etc. But you must **explicitly state/list all references you used in making your video!** Please note that conversations with another person are a reference and should be cited.
 - It is highly desirable that you show yourself, but if you feel very strongly you do not have to.

Technical Advice:

Making a Video:

You are not required to use Zoom to record your video! But it is a tool that you all have access to and it's easy to use.

You simply use Zoom to start a meeting, share your screen (so we can see your slides) and then hit record and start talking. You may have to ensure the Local Recording option is enabled on Zoom:

How to Make a Recording in Zoom

<https://support.zoom.us/hc/en-us/articles/201362473-Local-recording>

<https://youtu.be/1ZHSAMd89JE>

Uploading your Video:

For ease in submission, we are asking that your video projects be uploaded to YouTube as an unlisted video (i.e., it's viewable only by people who you give the link to and is not searchable). You will then submit a link to this video through CatCourses.

YouTube is easy to use if you have a Gmail account (and a Gmail account is free and easy to get!)

Uploading a video to YouTube is **easy but takes time**. We highly encourage you to leave plenty of time for uploading your video!

How to Upload an Unlisted Video to YouTube:

<https://www.youtube.com/watch?v=jaftEW9WI3U>

Video Project Rubric: (30 Points)

- (3 Points): Speaker gives the topic and introduces (name, course, section, semester and topic).
- (5 Points): Linear Algebra concept is explained clearly.
- (5 Points): Chosen example illustrates the concept clearly.
- (5 Points): Example problem is solved or worked through clearly.
- (5 Points): Concept chosen is connected back to the world beyond the course. (Why is this useful.)
- (3 Points): Effort put into presentation.
- (1 Point): Provides visually or verbally (explicitly states) any references used in preparing their project.
- (3 Points): Video is between 4 - 7 minutes. (1 Point deducted for every minute you outside of this range.)