

# Introductions

I want to welcome you back from spring break to what should be a delightful quarter of linear algebra.

This was perhaps my favorite course as a community college student. & I am excited to be able to share it w/you.

Before going thru the syllabus, I wanted to tell you a bit about myself.

I grew up in this area. I home schooled, did 2 yrs of Running Start, I earned my BA in 1999 @ TESC in poli-sci, lit, & math. I finished my MS. in 2001 @ WWU. I am in my 9th yr @ HCC & have been tenured the last 6.

I enjoy teaching math @ all levels, but have recently focused @ calc & above. I spent last year reading & writing on the phil. of math. I am the advisor to CU.

I am married to a beautiful wife, Charlene & have 3 kids @ home. I enjoy reading, softball, booms, & remodeling. I am also a Christian which means more than attending church on Sundays. It impacts every area of my life & I hope you will see that it makes a difference in how I treat you.

If you want to read the rest of the story, you can check it out @ meetthe prof. com.

I am interested in you & ask that you tell me something about yourselves.

Distribute note cards.

High Points of the Syllabus.

I wanted to share a bit of the history & intention of linear algebra.

### History.

- The beginnings of LA trace back to 300 BC in Babylon & 200 BC in China where we have records of a systematic approach for solving linear systems.
- The next steps focused on what we call the determinant. The Japanese arithmetic sage Seki came up w/ the idea in 1683. Leibnitz also came up w/ it independently.
- Gauss-Jordan elimination was formally brought to the mainstream in around 1849. (Wilhelm Jordan)
- Sylvester coined the term matrix in 1850
- The Matrix stamping keanu Reeves & Lawrence Fishburne was released in 1999.

Why is linear algebra in the curriculum?

(1) Applications.

- engineering
- physical chem
- business
- computers
- modeling.

(2) LA challenges traditional notions such as  $ab = ba$ . It is self-contained & requires little prereq. knowledge, yet it challenges intuition in part because it is not typically a visual topic.

(3) It is a valuable intro to mathematical abstraction & logical reasoning. It is likely the 1st course since H.S. geometry where you will be required to perform proofs.

We will focus on (2) & (3) although I will introduce apps as time allows.

Structure/Pace of the course,

Spring: 48 class days

3 exams

3 quizzes

4 review days

3 matlab days

9 HW days

1 intro day (today)

---

25 lecture days to cover 25 sections,

It is very important that you pre-read sections, stay on top of HW, & take advantage of resources.

For tomorrow: pre-read 1.1

collect response cards.