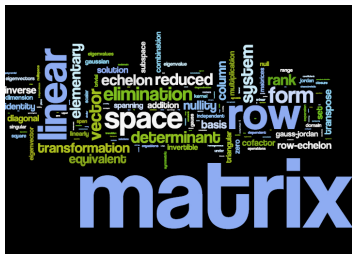


- so useful and applicable
- unifies, elegant and efficient



- so useful and applicable
- unifies, elegant and efficient
- hard to think of a branch of mathematics where linear algebra is not useful

*Any fool can make things bigger, more complex, and more violent. It takes a touch of genius - and a lot of courage - to move in the opposite directions. [Albert Einstein]*

## *Final Research Presentations—Products*

- Part 1: Review of only the topics that connect to part 2 —as if they were studying for a final exam on only those specific topics—product is a partial study guide of sorts
- Part 2: Extension of class work
- Part 3: Annotated references [print & online sources, people and pics]
- Part 4: Peer review and self-evaluation
- Exam Day: Tape up all work. Half class presents at once and other half peer review. Groups in different sessions.



## Educational Goals at ASU

- *Thinking Critically & Creatively*  
research and creative product
- *Communicating Effectively*  
writing, speaking and reflecting
- *Making Local to Global Connections*  
math applies in many settings, multiple perspectives
- *Understanding Responsibilities of Community Membership*  
citations, peer review, actively listening to each others perspectives and presentations...



Die  
**lineale Ausdehnungslehre**

ein

**neuer Zweig der Mathematik**

dargestellt

und

durch Anwendungen auf die übrigen Zweige der Mathematik,

wie auch

auf die Statik, Mechanik, die Lehre vom Magnetismus und die  
Krystallonomie erläutert

von

**Hermann Grassmann**

Lehrer an der Friedrich-Wilhelms-Schule zu Stettin.

Mit 1 Tafel.

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Leipzig, 1844.

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*One of the supreme landmarks in the history of the human  
mind. [George Sarton]*