#flo #inclass

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1 | **Day one!**

colledge level probabilty and distrubtion class based on the harvard course, which is a good resoruce!

- calculus based class (#review)
- assuming we know
  - e shows up alot
    - the limit as n -> inf of $(1+\frac{x}{n})^n = e^x$
    - $e^x = \sum_{n=0}^{\infty} \frac{x^n}{n!} =$ (the taylor series expansion)
    - and ofc set notation
- if you are ok w/ coding (hell yeah) make some sims! but not today
  - for today, we are naive!
- workin w/o computer screens (nah)
- we should also have a notebook
  - we are gonna have a lot of absences (due to covid)
  - thus, organization is good!

but wait, what is naive?

- experiment: doing a thing, which has a random outcome
  - eg. draw 2 cards form a deck
- **the sample space**: Ω. the set of all possible outcomes
  - $= \{(As, Ah), \dots\}$
- **event** is subset of the sample space
  - eg. the second card is an ace
- **the naive definition of probability** (almost never works) is P(A) = { outcomes where a happens}{ outcomes}
  - aka, $\frac{|A|}{|\Omega|}$ where omega is the num of elements
  - idk why the first latex doesnt work

1.1 | **the problem set!**