

EECS 106B/206B

Discussion 9

GSI: Valmik Prabhu



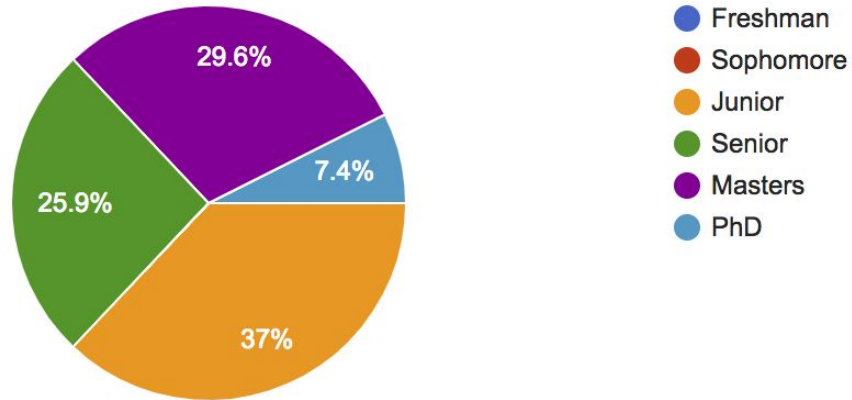
Action Items

- Lab 2 released
- HW 3 due this weekend
- Shanker Sastry tomorrow!

Feedback Survey Results

What year are you?

27 responses

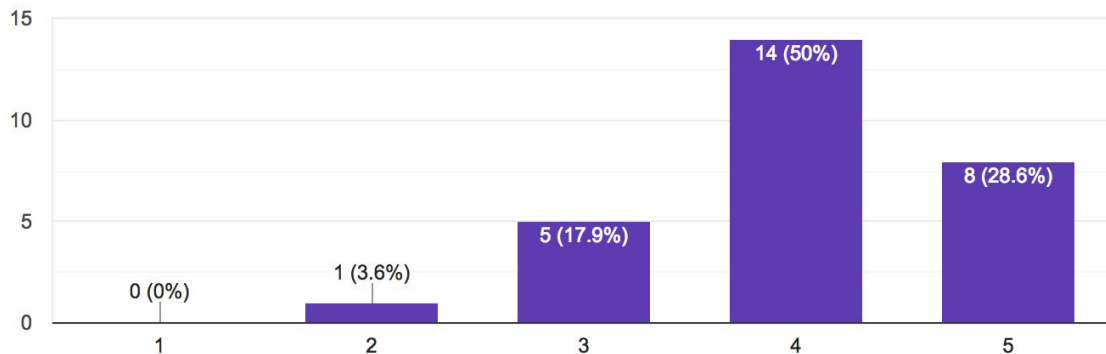


Feedback Survey Results: Overall

- Lots of work, steep learning curve
- Guest lectures are good
- Challenging but rewarding

How do you like the course overall?

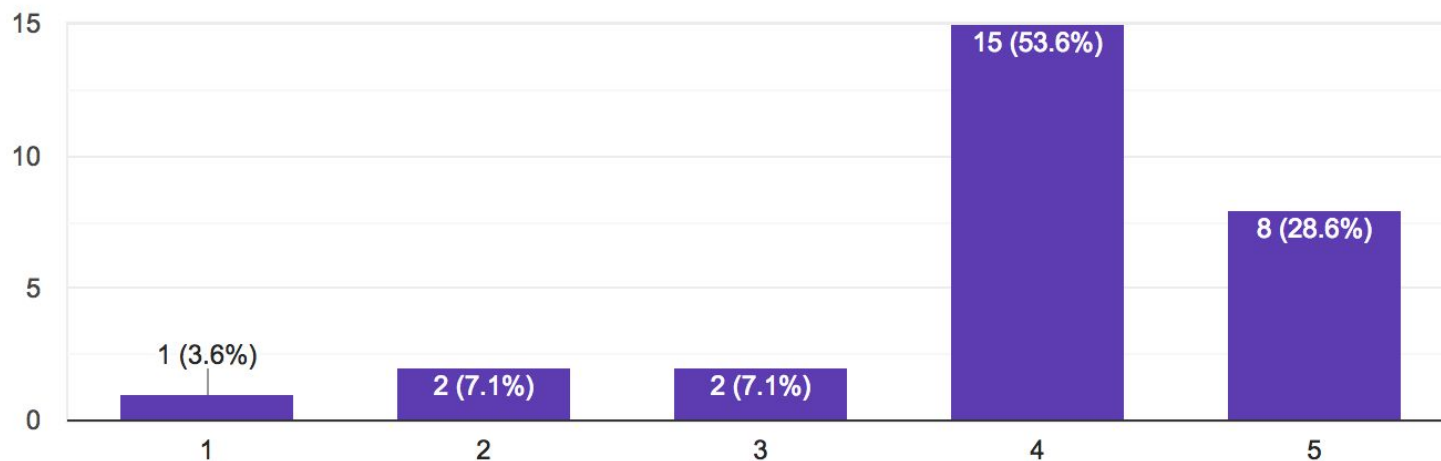
28 responses



Feedback Survey Results: Lab

How much did you learn in Lab 1

28 responses

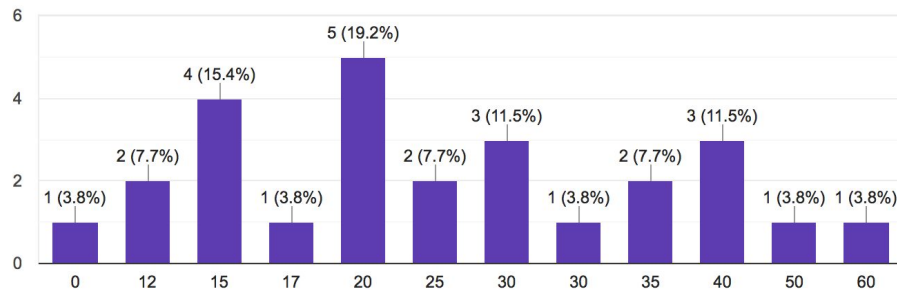


Feedback Survey Results: Lab

- Lots of work (60-80 hrs of work, for 3 people over 3 weeks, is *expected*)
- Bugs are hard to work through, no simulation
- Don't let people work solo
- Update the handout as the semester progresses?
- Lab OH needed? (All OH are lab OH)

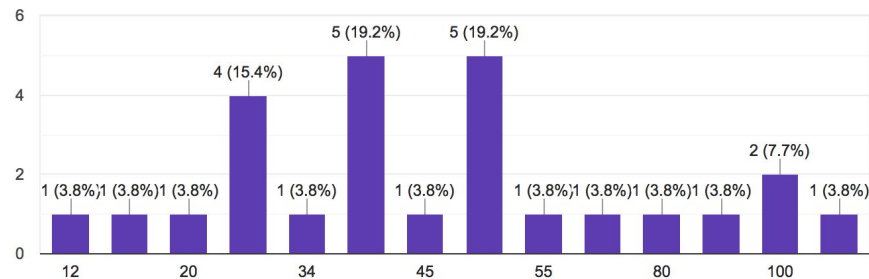
How many hours did you individually spend on lab 1?

26 responses



How many hours did your group spend overall on lab 1?

26 responses



Lab Action Items

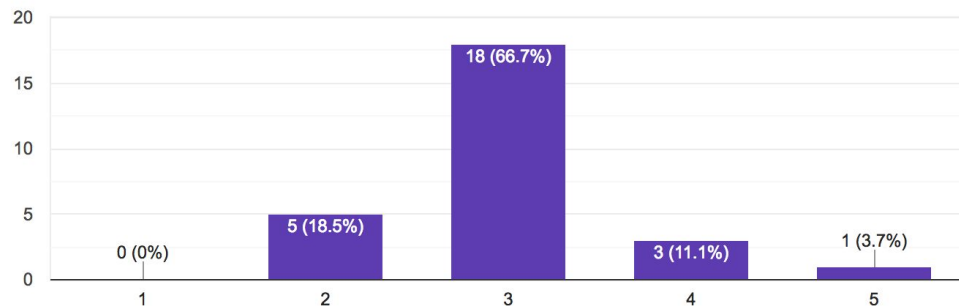
Be more clear about which parts are tested and which are experimental

Feedback Survey Results: Discussion

- Most feel that there's enough lab coverage, but some disagree on both sides
- Repetition of lecture concepts is good
- More examples/calculations
- Slides earlier (probably can't do, maybe shouldn't)

Have discussions been too easy? Too advanced? The right level?

27 responses



Discussion Action Items

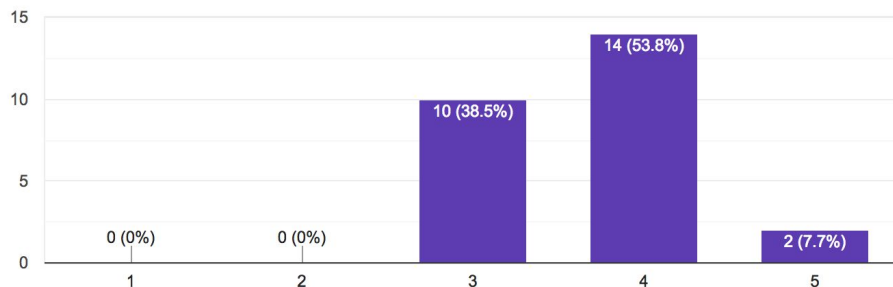
Be more clear about potential lab pitfalls (things that look easy but can take time)

Feedback Survey Results: HW

- First HW was hard (if you didn't do 106A)
- Not that connected to lecture?

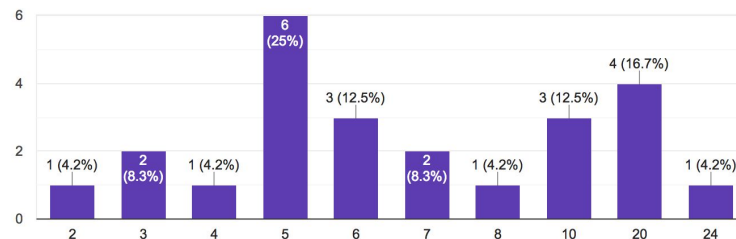
How much have you learned from the homework?

26 responses



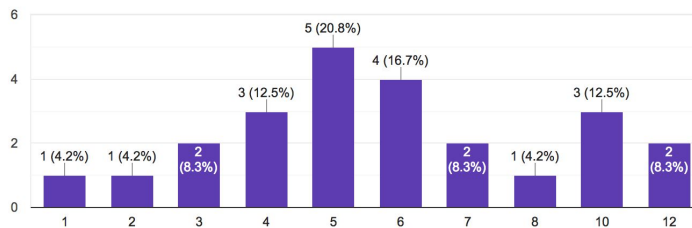
How many hours did you spend on HW1?

24 responses



How many hours did you spend on HW2?

24 responses



Homework Action Items

We won't have HW and lab due the same day again

Feedback Survey Results: Instructor Support

- Piazza is very useful
- Post resources to Piazza?
- OH Useful (but somewhat sparsely attended)
 - OH time change?
- Bcourses needs better organization

Support Action Items

Talk to Bajcsy about Bcourses organization

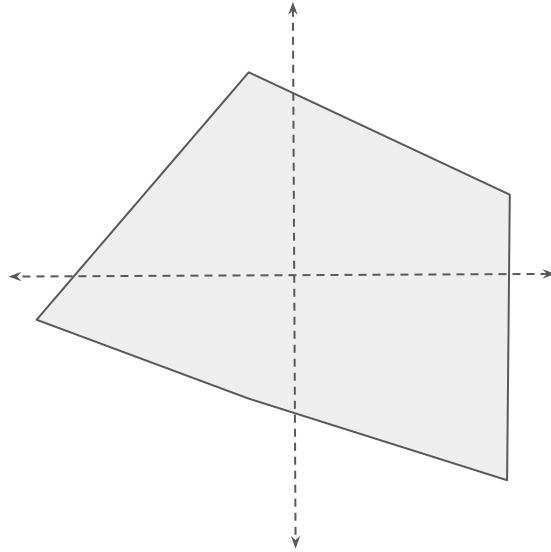
Instantaneous Construction

How do we get force closure with frictionless contact points?

Ensure that:

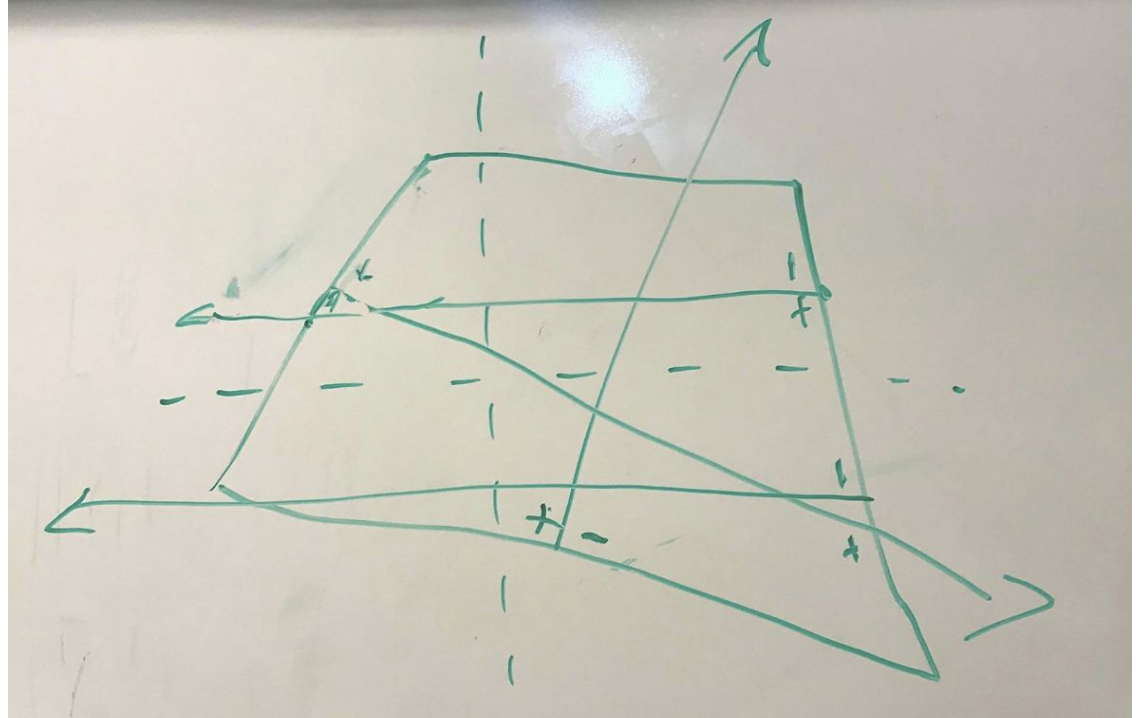
- The forces positively span x and y
- There are no possible rotation centers (the induced torques positively span R)

Practice Problem 1: Instantaneous Construction



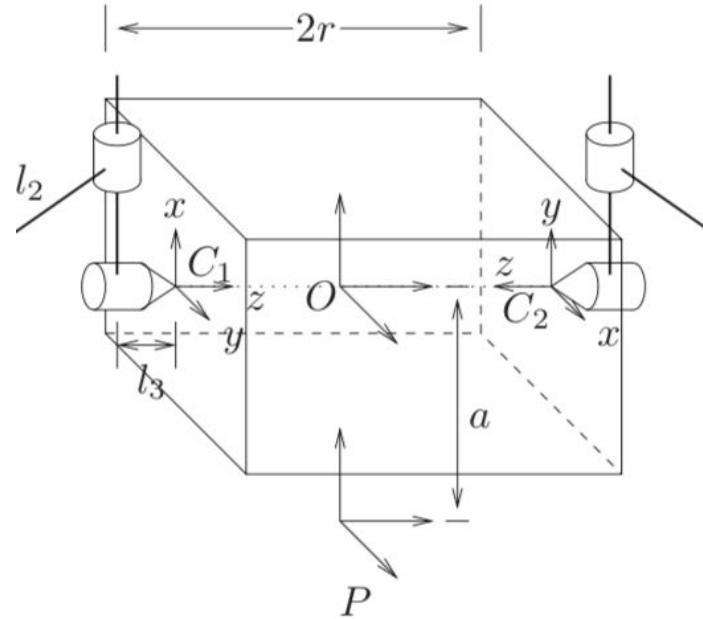
Practice Problem 1: Solution

We can see by inspection that the four vectors positively span \mathbb{R}^2 . Using the instantaneous construction process we show that there is no valid center of rotation.



Practice Problem 2: Gravity Resistance

MATLAB!!!



Practice Problem 2: Solution

See uploaded matlab code