

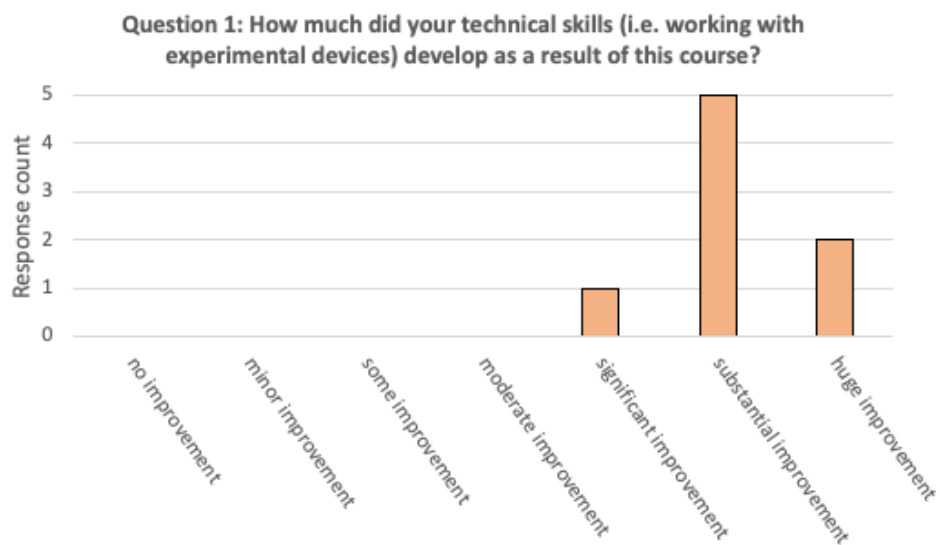
Eric Edlund

PHY 357-001

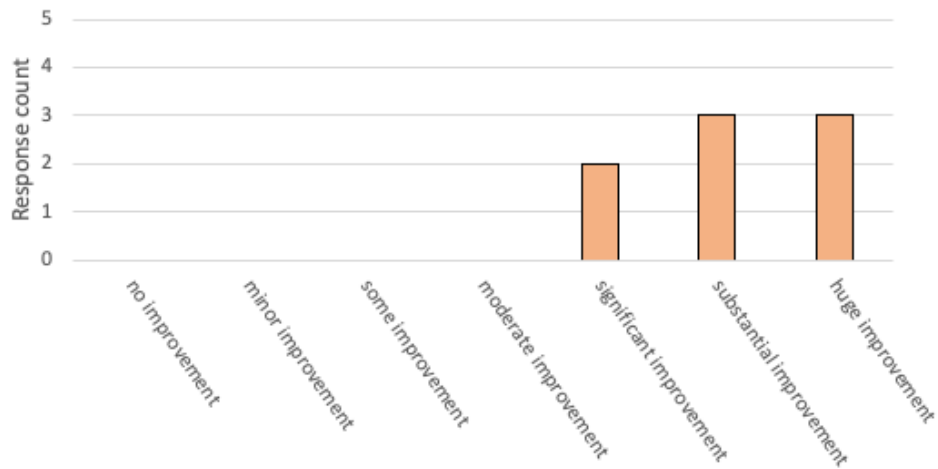
Spring 2021

Note: Despite multiple reminders to the class, only 1 out of 11 students submitted the official CTE for PHY 357 in the Spring 2021 semester. Given the inadequacy of the CTE data as any kind of reliable metric for personal or administrative assessment, I also administered an anonymous, end-of-semester survey using Google Forms, to which I received 8 responses. This survey consisted of four ranked questions and four free-response questions.

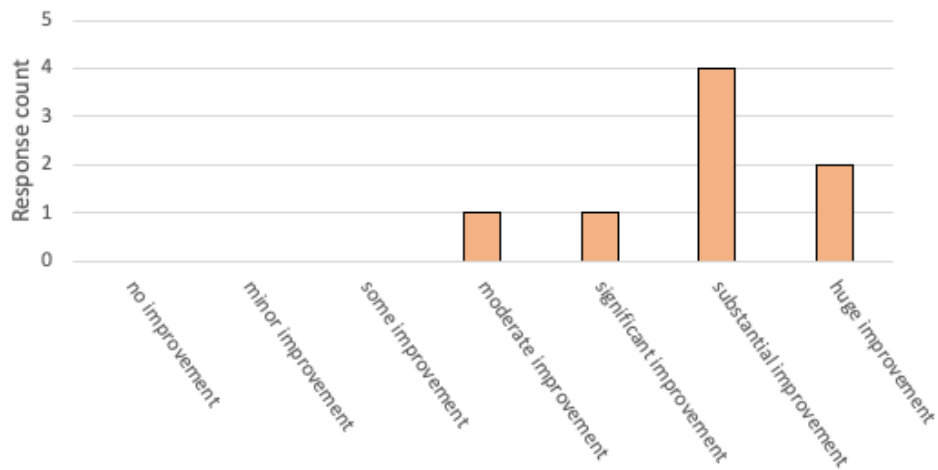
My philosophy in designing this survey was to specifically target information that I felt would be both supremely important to me as an educator as well as useful to administrators who are assessing teaching effectiveness. A major component of these questions asks for students to present measures of their gains in skills and understanding, followed by a set of specific (directed) free-response questions that provide me with specific feedback about how I could improve my course.



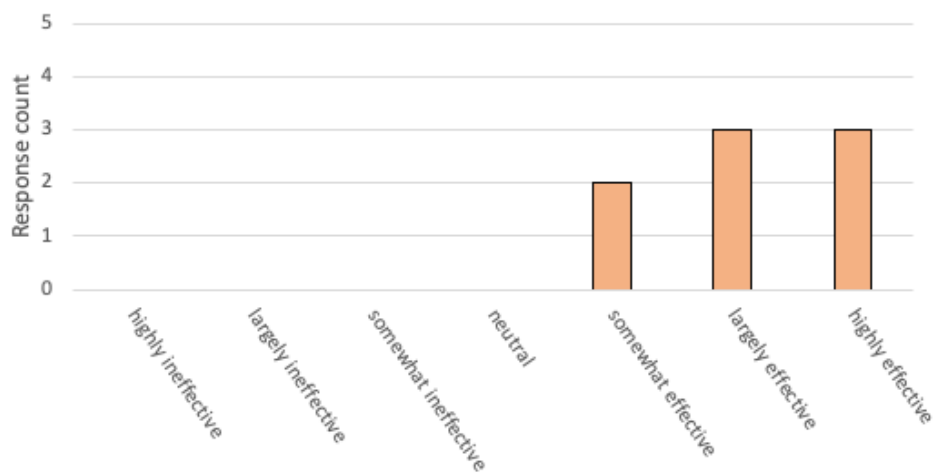
**Question 2: How much did your analytical skills (i.e. statistical analysis) develop as a result of this course?**



**Question 3: How much did your writing skills develop as a result of this course?**



**Question 4: How effective was Professor Edlund as a teacher for PHY 357?**



### **What part of this course was done best?**

- Variety of labs, and student choice.
- Choosing the experiments we do
- Statistical Analysis and Wind Tunnel
- I thought giving a hands off approach was the best. I honestly did not like it at the beginning, but figuring it out ourselves helped us understand the lab more.
- the comments left on the reports
- Flexibility and Independence on experiments and reports
- The selection of experiments, and the emphasis on the writing process

### **What part of this course could be substantially improved?**

- The activity we did with the librarian should be done at the beginning of the semester to help with figuring out how to approach each lab. After that activity it was a lot easier to come up with questions to ask and experiment with and completing the pre-lab.
- Maybe less experiments at one time. It was sometimes hard to get help when needed.
- Experimental Set-up
- I think the labs were a little disorganized, but since it was Dr. Edlund's first time I have confidence he will make improvements in the future.
- time period during the end was a little jam packed
- The clarity of the entire statistical analysis portion of the class
- I think everyone was confused about how the labs were graded. I would use the excel system from the beginning next time. I would also not take points off on the second copy for anything that was missed by the grader the first time

### **What experiments would you like to see added?**

- Maybe a few basic experiments, but then let students try to design an experiment that's more elaborate. Or take measurements of a fundamental experiment in a new manner to compare results.
- None that I can think of
- equilibrium scaling
- More windtunnel experiments, maybe developing different designs to test in the wind tunnel as opposed to existing objects.
- Something more explosive

### **General comments about the class and/or Professor Edlund:**

- The class definitely helped me be more comfortable in a lab setting. I used to dread labs but this past semester, I looked forward to lab each day. Thank you
- Fun class, lot of help. I am happy you taught it this semester
- It seemed the course at times was just a more precise 201/202 course. We used almost the same equipment that is found in introductory labs but took more measurements, and analyzed the systems at a more advanced level, but otherwise it was the same "fundamental" experiment. Overall, I thought the course was great- but allowing students to design their own experiment might lead to more engagement.
- I loved the wind tunnel and its been an honor working with Dr. Edlund for 3 years now. Much like the hands off approach, he was not one of my favorite professors at the beginning, but now I can see that he was asking for the best from his students and that has made me a better physicist and a person. Also I thought you should know that the CTEs are not working for me on different browsers and even on different computers. I was unable to give feedback to any of my professors and I know many other students had the same issue. We let Dr. Emam know and he contacted the school the week before finals but we were still unable to do the CTEs.
- amazing overall, very beneficial
- I liked the class, but I definitely felt there was a lack of clarity on the statistical analysis portion of the class unless students looked for help outside lecture. I think on the homework and final and lab reports a lot was to be expected on this topic but not a lot of class time was spent on it besides solving a couple homework problems and scattered mini lectures. It wasn't done poorly but I did feel the balance between expectations and in class devotion to the topic were off.
- Had a really fun time. Felt more like a community of people doing science than a class, which was highly enjoyable