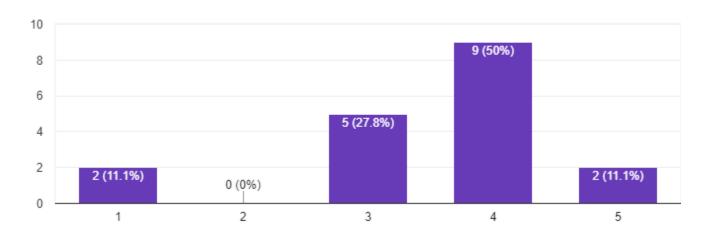
## **Frustration**

#### Rate your level of frustration with the course

18 responses









## **Frustration**

- the assignments are alot with a project they are like baby projects
- Not enough understanding of python, I wish their were more lessons tou understand better.
- I am able to complete all of the given tasks, but there have been times that I feel that the instructions for given tasks have been to vague which we talk about after the fact as opposed to being overly specific in the beginning and limiting our work.
- Its good that is project based so we can try what we learn in a real world scenario
- Sometimes instructions are not clear, but they are always take care of.
- Often times, i find some of the assignments vague or difficult to fulfill. I am pleased, however, with the amount of content I've learned in the class. It's good portfolio material. Also, I think it would help to have assignments graded earlier so I can know my own progress and whether or not I am fulfilling things correctly.
- The assignments that seem simple end up being much more complicated than they appear and end up taking large amounts of time.
- I keep having to spend way too much time on interpreting your assignments. I consistently interpret your instructions to want a goal that is much more time consuming than you intended it to be.
- There is deadline we need to keep, since the variables are many, the testings of the device can be challenging. Also, we need to make a new prototype every 1-2 weeks.







## Frustration II

- Software issues plague everything I do and sincerely hold me back. It's also disappointing to get subpar grades back after long periods of time, because if I knew I wasn't doing well I would have had the opportunity to improve. Expectations are not always clear.
- Iterating every week has been really hard, because of the tension in the group. I want to have a functional robot by now that works, but it is really hard to get my teammates to work together. I am not very skilled at the CAD, but I am great at programming and paper writing, which is where I have been living for this project. This doesn't bother me. [REDACTED]
- Otherwise, I have had a great time in this class and I have learned a lot. I wish that my group and I had learned the earlier stuff the way that you had intended us to learn it."
- I'm primarily electrical so the mechanical aspects aren't as easy for me to grasp. Sometimes the math involved is glossed over.
- More clarity in assignments requirements. For example, the motor and what the output
  of the sine wave was not as clear till after due time.
- Too many homework. Too many reports. Reduce the time we have for our project. The Homework have so many bullets and items and it is sometimes hard to follow what's the purpose of each bullet. We only find out that we have missed one or two items when you grade it, which is most of time long after that course and basically is not useful to know. Maybe you can have the overall goal defined in homework and don't care about every small aspects in homework.







## **Frustration III**

- I think it is the seemingly vast openness of the assignments. I understand the assignments are designed to give a lot of leeway but I think it is just too much. There isn't enough specific instruction on how to do the assignments. Because everything in this course is so new and right on the line of research, there really isn't even online resources to help steer in the right direction or answer questions.
- Homework is the most frustrating time that I have.
- Programming has always been the least covered topic in the mechanical engineering major, so this was the most frustrating and difficult part of the class.







## **Frustration IV**

- First and foremost I would like to apologize for my response earlier. It
  was full of frustration and complaining and it was certainly not the helpful
  feedback that you were looking for.
- I love your class. It has given me a chance to see a whole new world of robots and it is thrilling to think of the possibilities. However, with so much new information, it is really hard to keep up sometimes. I feel like there is just so much to do, but I am restricted from doing things that need to be done, like iterating and printing by my responsibility within the team and my lack of skill. It's not that I mind my position in the team, but I haven't had things to code until now, since the python code is really more towards iteration and we just got a motor this week. So I've been research-and-report person and bounce-ideas person and try-to-keep-teammates-working-together-and-hopefully-communicating person. This is probably more of a personal complaint again, but I wish we had parts sooner so that I could be more involved in my swim lane, instead of the helper bee in the others.
- I think it would have been beneficial to my team and its progress if we had had meetings with you sooner. Then we wouldn't have gotten so far off course.



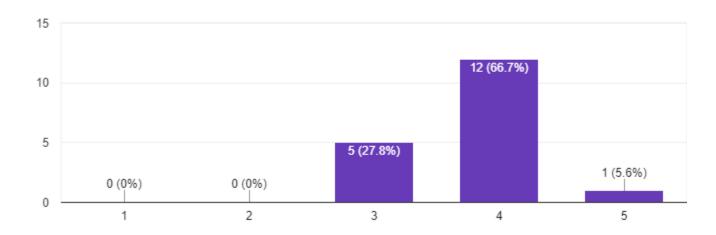




## Happiness

### Rate your level of happiness with the course

18 responses









### **Comments 1**

- there is alot of good information in the class- but the documentation is not fully explained so it is hard to go back and reference lectures
- I enjoy the diverse understanding this course has offered. I hoped to have more python coding examples.
- I thoroughly enjoy the content of this material. I find it engaging and challenging enough to keep me interested in as opposed to just a skate in the park.
- some material is repeated
- Nothing specific
- I am content with the fact we don't have a quiz or final exam. That's a nice stress reliever in a way.
- I like how each assignment leads to the next design aspect of the robot.
- Hard expectations for short time constraints
- This course has been challenging, and the homework prepares us well for the coming tasks. The homework sometimes are difficult to understand. I would appreciate better-explained documents.
- I am very interested in the subject matter of this course, but there are several gaps in critical knowledge when it comes to the software we use to create our robots. I would be happy to put more effort into the course theory than minor details that are glitching. Documentation of glitches and solutions would be nice.
- I am learning a lot.







## Comments 2

- Was hoping there was more of the electronics side of robotics in the class, especially as it pertains to fold-able robots. Otherwise though, the course is interesting.
- Enjoying the learning about laminate mechanisms and building application of kinematics. Thought there would be more python programming toward controlling vs computing (i.e. raspberry Pi programming controlling related to robot).
- "I like the class. It helps in many broad cases. The only thing is that going through mechatronics stuff, it feels like little waste of time. First check if people need it or don't have experience with, then have it in lecture.
- I felt so unprepared for this course in terms of background skills. I really like the design process and what is possible with the laminate designs. I wish Solidworks models could work with the designs (since I'm already certified in Solidworks and popup CAD is pretty poor in terms of user environment). I would also make an argument that some sort of programming course needs to be a prerequisite, my frustration and lack of skill in python was so insanely high. My experience with programming was only with MatLab 2 years ago.
- At this point, I just want to be done. I am learning and enjoying the course, but I have to implement time management with my other courses.
- I found the homework really difficult to keep up with since so many topics were covered in. There are a lot of gaps in my knowledge so I had to spend a lot more time trying to relearn the material. I like how you're teaching, but the material is a bit too fast and complex for me. I think it's great that you're willing to help students learn and you're passionate about the subject. Going over the assignments also help out a lot.
- Fantastic class.







# What would you like out of the course in the last month?

- time to just finish the project
- Availability to parts and design instruments.
- To create a robot that jumps and is consistent in its abilities.
- python serial data communication and connection to ROS
- Examples of laminate robots to take inspiration from, different approaches to solve the same problem in laminate robots, Debugging maybe.....
- I would like to build a successful robot. If we make multiple prototypes, can we keep them and leave the "final" one for the school? Thanks
- See how the robot design evolves.
- more time. more sleep. less stress.
- I'm hoping we can focus more on the project instead of assignments.
- For our designs to work and pay off going through (nearly excruciating) minor details to get us there.







# What would you like out of the course in the last month?

- I really liked the Arduino. I did stupidly put all of the pins on in the opposite orientation that you said, but it still works and I have enjoyed it.
- Instruction on using alternative materials to cardboard. Maybe a comparison of the various materials available and their pros/cons.
- project time to ensure completion
- I don't have anything i mind, I just need more time to work on project.
- I think more examples of what can be done with foldable and more "tutorials". I think I get the most when you go through in class examples step by step so I can ask questions and have a useable template so to speak. It is much less frustrating when I have a base to work from and can build off of.
- Definitely time to work on our projects as a group in class. I like how we can get instant feedback, and your honest opinion on what needs to change for a successful. I would like to learn sensors at least once a week.
- The rest of the month covers what we need to know. Maybe more feedback and guidance on the projects would help.
- I just want my robot to work. I would really like to go to innovation showcase for once and have a functioning device.





