



## Assessment Statistics: PY106 ending survey

The statistics are calculated based only on the attempts being used in the grading option (Last attempt, First attempt, Lowest Score, Highest Score, or Average of Scores). If Average of Scores is the grading option, then all attempts are included in the statistics.

**Name** PY106 ending survey

**Attempts** 55 (Total of 55 attempts for this assessment)

### Instructions

#### Question 1 Multiple Choice

Who would you rather ask your question about the lab procedure?

Answers	Percent Answered
More likely to ask Learning Assistant	3.636%
Equally likely to ask Learning Assistant or Teaching Fellow	69.091%
More likely to ask Teaching Fellow	27.273%
<i>Unanswered</i>	0%

#### Question 2 Multiple Choice

Who would you rather ask your question about the homework?

Answers	Percent Answered
More likely to ask Learning Assistant	7.273%
Equally likely to ask Learning Assistant or Teaching Fellow	49.091%
More likely to ask Teaching Fellow	43.636%
<i>Unanswered</i>	0%

#### Question 3 Multiple Choice

Who would you rather ask your question about what might be on an exam?

Answers	Percent Answered
More likely to ask Learning Assistant	9.091%
Equally likely to ask Learning Assistant or Teaching Fellow	43.636%
More likely to ask Teaching Fellow	47.273%
<i>Unanswered</i>	0%

#### Question 4 Multiple Choice

Who would you rather ask a question about how to study for the exam?

Answers	Percent Answered
More likely to ask Learning Assistant	18.182%
Equally likely to ask Learning Assistant or Teaching Fellow	56.364%

More likely to ask Teaching Fellow	25.455%
<i>Unanswered</i>	0%

**Question 5 Multiple Choice**

Who would you rather ask your question about the readings for the course?

Answers	Percent Answered
More likely to ask Learning Assistant	16.364%
Equally likely to ask Learning Assistant or Teaching Fellow	58.182%
More likely to ask Teaching Fellow	25.455%
<i>Unanswered</i>	0%

**Question 6 Multiple Choice**

Who would you rather ask a question about basic topics in the course?

Answers	Percent Answered
More likely to ask Learning Assistant	5.455%
Equally likely to ask Learning Assistant or Teaching Fellow	70.909%
More likely to ask Teaching Fellow	23.636%
<i>Unanswered</i>	0%

**Question 7 Multiple Choice**

Who would you rather ask your question about complex topics in the course?

Answers	Percent Answered
More likely to ask Learning Assistant	1.818%
Equally likely to ask Learning Assistant or Teaching Fellow	34.545%
More likely to ask Teaching Fellow	63.636%
<i>Unanswered</i>	0%

**Question 8 Multiple Choice**

Who would you rather ask your question about time management?

Answers	Percent Answered
More likely to ask Learning Assistant	29.091%
Equally likely to ask Learning Assistant or Teaching Fellow	58.182%
More likely to ask Teaching Fellow	12.727%
<i>Unanswered</i>	0%

**Question 9 Multiple Choice**

In general, who from your point of view is more helpful?

Answers	Percent Answered
Learning Assistant is more helpful	3.636%

Teaching Fellow and Learning Assistant are equally helpful	63.636%
Teaching Fellow is more helpful	32.727%
<i>Unanswered</i>	0%

**Question 10 Multiple Choice**

In order for you to get the highest possible grade for the course, homework was ...

Answers	Percent Answered
not at all helpful	0%
very little helpful	0%
somewhat helpful	23.636%
very much helpful	76.364%
<i>Unanswered</i>	0%

**Question 11 Multiple Choice**

In order for you to get the highest possible grade for the course, lab activities were ...

Answers	Percent Answered
not at all helpful	7.273%
a little helpful	30.909%
somewhat helpful	43.636%
very much helpful	18.182%
<i>Unanswered</i>	0%

**Question 12 Multiple Choice**

In order for you to get the highest possible grade for the course, lecture examples of problem solving strategies were ...

Answers	Percent Answered
not at all helpful	10.909%
a little helpful	14.545%
somewhat helpful	25.455%
very much helpful	49.091%
<i>Unanswered</i>	0%

**Question 13 Multiple Choice**

In order for you to get the highest possible grade for the course, radio clickers were ...

Answers	Percent Answered
not at all helpful	14.545%
a little helpful	43.636%
somewhat helpful	32.727%
very much helpful	9.091%

*Unanswered*

0%

**Question 14 Multiple Choice**

In order for you to get the highest possible grade for the course, lecture demonstrations were ...

Answers	Percent Answered
not at all helpful	5.455%
a little helpful	14.545%
somewhat helpful	45.455%
very much helpful	34.545%
<i>Unanswered</i>	0%

**Question 15 Multiple Choice**

In order for you to get the highest possible grade for the course, office hours were ...

Answers	Percent Answered
Not at all helpful	5.455%
Very little helpful	10.909%
Somewhat helpful	38.182%
Very much helpful	45.455%
<i>Unanswered</i>	0%

**Question 16 Multiple Choice**

In order for you to get the highest possible grade for the course, teaching fellows were ...

Answers	Percent Answered
Not at all helpful	0%
Very little helpful	0%
Somewhat helpful	32.727%
Very much helpful	67.273%
<i>Unanswered</i>	0%

**Question 17 Multiple Choice**

In order for you to get the highest possible grade for the course, learning assistants were ...

Answers	Percent Answered
Not at all helpful	3.636%
Very little helpful	12.727%
Somewhat helpful	52.727%
Very much helpful	30.909%
<i>Unanswered</i>	0%

**Question 18 Essay**

Please, leave any comments and suggestions about the course. Thank you!

### Unanswered Responses

16

### Given Answers

Great teacher, always there to help :)

I liked how the labs for the second semester helped to enforce understanding of more complex topics. I also liked all of the in-class demonstrations and practical real-world applications of physics.

Course was very interesting. More demonstrations and time on making sure the students are familiar with basics before moving on to harder material. Also going through problems entirely or the equations to solve problems instead of rushing through problems assuming everyone gets it would be helpful also.

I absolutely HATED physics before I took this course. However, even though my grade will not likely be an "A", I have found a new appreciation and interest in the subject. This professor was exceptional and I thoroughly enjoyed his class. His in-class demonstrations were spectacular and he rarely left an example problem unfinished. If I could have done anything differently, I probably would have gone to office hours. His lectures were very good though, so I would have needed minimal assistance had I attended.

A very well executed course.

The labs questions are sometimes not very helpful as an aid to understand what was learned in lecture. Lecture slides were sometimes hard to understand because of all the writing from the professor. Writing on slides is not very helpful-could barely understand it.

Great class overall webassign was very helpful as were the TFs at office hours. Tests were very fair as well.

LA's and TF's were both equally helpful in this course.

I really liked Val! Although his English was a little difficult to understand at times, he presented the material well, has a good sense of humor, and in my opinion, made physics bearable. I learned so much in this course and he was a big part of that. The course required a lot of work but that was expected. Webassign was very helpful but the labs were less helpful because they focused more on theoretical concepts rather than on the practical problems that were asked on exams. Overall, I would say that it was a well-taught but difficult course.

I enjoyed the course. Professor Voroshilov was very enthusiastic and, although he was confusing at times, really catered to the students and helped us succeed. The lab activities and TFs/LAs helped me understand most of the really confusing parts of lecture by helping us work through problems, although labs for the most part were needlessly long, often irrelevant, and quite redundant. They really could be streamlined. WebAssign was the best tool for learning the material as it forced us to become familiar with equations. Overall, the course was a good experience and I would recommend it, especially over the summer.

The labs really are fairly useless. I know many students would FAR prefer an extended discussion with worked problems than a lab with only semi-functioning equipment and questions that are so contrived they are barely answerable.

The TFs are awesome.

The learning assistants are ok, but more of them would be appreciated. Especially if they held office hours along side of the TFs so that there was more than one person in the office hours room at once and they could field the simpler questions.

Lab was not helpful at all when it came to learning the material. It was only helpful for my grade

because they were not graded and therefore were easy 100's just based on attendance. It is impossible to learn the material this quickly during the summer, so I only memorized steps on how to solve problems simply for the sake of the test, and not actually understanding the concept of why it worked. Office hours helped me learn the material because lecture made no sense 98% of the time. TF's were helpful, except for maybe one of them.

Out of the teaching fellows and learning assistants that were in our lab, I found that Clint was the most helpful. Oftentimes, the learning assistants would say they were "rusty" on most topics, and not very helpful in figuring out the answers. Clint was very patient, clear in explaining topics, and was a great teacher overall. Thank you Clint :)

Towards the end of the semester I found the lectures more understandable, and the concepts on the slides were more clearly explained. It was much easier to follow along and somehow did not feel as rushed. It felt less overwhelming in amount of information.

Both the LAs and TFs did a wonderful job helping me with understanding homework questions I was stumped on (and down to one or two guesses) and lab helped understanding applications of our concepts.

im not sure what you meant by learning assistant, but I had my own tutor for this class that I got through the Athletic department. So he was what I thought you meant by learning assistant, anything other than the TF.

No suggestions for the course.

The amount of office hours held helped a lot with understanding concepts and solving problems. When I go to office hours it's nice to be able to work on a problem by yourself, but when you do have a question, no matter when, have someone there to answer it for you.

Utilizing as many different visuals as possible, Professor Voroshilov is able to convey concepts so much better than someone simply using a powerpoint.

Professor Voroshilov is a great teacher!

The lab activities do not help much.

The homework helps a lot for exam preparation. Please make sure to include homework problems that are as difficult as exam problems.

Thanks for a great semester!

Too many unhelpful demonstrations. I would rather see the derivation of formulas. Honestly, lecture was a waste of time.

It would be helpful to all of the commuters if the class was not every day of the week, because commuting everyday is very expensive!

The TFs really helped me during my last week for this course because the concepts were so hard to understand. They definitely wanted to make sure I understood the concepts, so if I did not understand, they tried multiple times to help and tried different methods.

The TF/TA and Learning assistants both helped a lot. They were all very knowledgeable and I appreciate them very much so.

I thought it was perfectly fine

HW was a huge help. Attendance with clickers seemed odd. I attended every class up until this point and somehow only have an 80 in participation (sometimes forget to answer, or leave room for a minute)

I loved this course! It would be better if the professor didn't speed through problems and topics so quickly, but he was very helpful overall. Lab was extremely helpful in this course! It was very related to everything we studied and helped me significantly in understanding things I was confused about, which

ended up being helpful on the exam. Pat and Ben were my TFs and they were fantastic! Sometimes the teaching fellows would give conflicting explanations to questions during the lab. Sometimes in class there was a more difficult topic and I felt that he rushed through some of them, it would have been more helpful if he spent more time on some of the more difficult topics.

Office hours are extremely helpful. Labs need to be improved.

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better examples during class- directly reflecting exams

Course was a great. Clickers were very helpful and the homework made the quiz problems easier to deal with.

Labs tended to be a bit of a disaster for my lab group because we were the first class for each lab. NON of the teaching fellows had read any of the labs before getting there. They weren't familiar with the material and would have to reteach themselves as we went. Depending on who you asked, you would get a completely different answer to the same question. Sometimes they would tell us information that would be completely wrong, then later on in the lab, they'd realize it and we'd have to do pages of calculations over again. There was no "answer key" to any of the labs, so there were times when no one was exactly sure what the answer was. Clint, Holly, Pat, and Jess were excellent! I had frequent interactions with them and always went to them for help. They never made me feel as if I was asking a dumb question, as some TFs did. The labs were also more difficult for the first group because frequently, we hadn't even gone over all the information in the lab, so we were clueless about how to complete it.

I struggled with this class the most because we hardly ever went through problems completely in class. I rarely had problems in my notes that I could refer to when doing homework, which made it extremely difficult for me to learn the material. The professor also would make mistake (whether intentional or not) and then ask the class if what he had done was correct. So almost 100% when he asked the question, his notes were incorrect, which caused me to scratch out tons of notes and made learning more difficult. The clickers didn't really add to my learning of the material, but definitely made the hour and a half long class more enjoyable. I personally thought the book was awful. It was difficult to understand and I even bought a completely different book to use that was much easier to understand.

The professor was very entertaining and made the long class much more exciting. Tons of demonstrations were awesome as well. Helped to make the material more clear.

Very good professor!

Lab was very helpful in understanding the concepts and connections between variables, as it was possible to manipulate them and observe the outcomes, however many questions on the labs were difficult to understand at times.

I took CH101 and CH102 and was a learning assistant for BI108. I feel that over this summer for PY105/106, the learning assistants were not as heavily emphasized as in those classes. There also were fewer of them, so the professor himself and the teaching fellows were more active and hands-on with helping us finish homework sets and explaining concepts. Learning assistants did not need to go to office hours, and we only had one learning assistant with 3 teaching fellows in my lab section. This also maybe due to the nature of the course over the summer, whereas during the regular school year there are a lot more students and the professor has less ability to spread him/herself amongst 800 students.

I would only be equally likely to ask learning assistants and teaching fellows questions when they are both equally helpful/ knowledgeable about the topic. In many cases, it differed depending on the material we were covering. Homework, review sessions, office hours with Teaching Fellows, and class practice problems were very helpful!

I really think the lectures were taught poorly. He did not explain concepts in a clear way that clarified what I had been studying. To assume that everyone in the class gets something is not a good idea it would be better to walk through the procedures of important examples so people actually understand

and can learn the topics better. I though the office hours were the most helpful part of the class.

good course, could use more time on explaining how to apply theories

A suggestion for next year is having the answers for every slide during lecture posted online. Some of the questions on slides are ambiguous so it can be hard to determine what the solution is. If you could highlight the correct answer for multiple choice problems and have a solution slide for more complex problems, I think it would be very beneficial for future students.

The course overall was good. It taught me a lot in a very short amount of time. I really appreciated the many office hours that were held and the professor along with the teaching fellows were extremely knowledgable. The learning assistants were good, but they were shaky on few or more of the topics so I was never sure if they were correct in their thinking.

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