

California Polytechnic State University

Schwartz, Peter  
Spring 2017PHYS-310 01 Physics of Energy (PHYS-310-01-2174)  
No. of responses = 21 out of 32 - 65.63 %

## Overall indicators

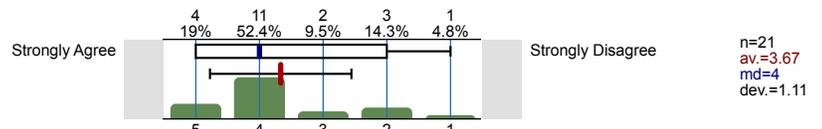
Summary Evaluation Average (2.1 &amp; 2.2)

av.=3.71  
dev.=1.08

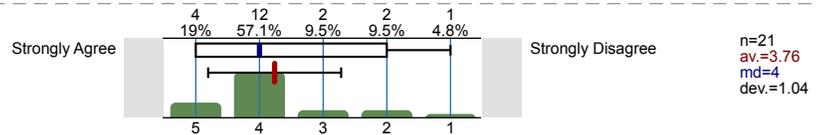
## Survey Results

## 2. Summary Evaluation

2.1) Overall, this instructor was educationally effective.



2.2) Overall, this course was educationally effective.



## Comments Report

## 1. Instructor Evaluation

- 1.1) Write any comments below that might help your instructor evaluate his/her teaching performance. What did you particularly like? What improvements could you suggest?
- "Flipped classroom" was interesting, but difficult to adapt to. Sometimes gave the impression that you were trying to avoid teaching. Video lectures were generally well done. Would like more guidance on the projects. DH's book was very dense, not always relevant to class discussion.
  - Drop the projects, most people in the class are working on similar things outside of class and adding the project just lead to extra stress.
  - He is insensitive to students asking questions. He blatantly makes fun of the questions, or he will avoid the question all together because he doesn't want to talk about it. However, the questions he avoided were pivotal to the class and would have improved our learning quality if he knew the answers to them. He is constantly battling himself in class, he will take a few minutes, multiple times each class, to decide if he wants to talk about a subject. He was not organized in his classroom and his lessons online were very basic; none of the lessons went into much detail. Also, most of the videos we watched were him lecturing five years ago, so the information was wrong a lot of the time. He forces his political values down your throat.
  - I actually really liked the class, but it takes some getting used to. The material we learn is very relevant to everyone's lives and will help me to make more informed decisions in the future. It is obvious that Pete has low patience for class logistics, but it is very important in the beginning of class that students really know what the quarter is going to be like. Take that whole first day to explain to the students that the class is a little different. As a student, I would have liked to have been told explicitly that the homework is supplemental and doesn't count towards your grade, but does give a glimpse at your unique grading style and is very representative test questions. It would be good to mention that you grade the tests yourself and therefore don't adhere to a strict point rubric which actually works in our favor. Additionally, we definitely need a bit more guidance on the projects, it is very confusing to figure out who to coordinate with on these projects that are already being worked on and exactly what our role was supposed to be. Finally, I recommend you show a tad more patience for questions in class. I know 50 mins is not a long time to get through everything, but then suggest that the student talks to you after class or in office hours instead of basically saying we have better things to do right now. I really love your passion for the subject, but a tad less urgency and bit more patience would go a long way with the students.
  - I am really glad I took this class, it has exposed me to more information about energy, politics, innovations, and statistics I would probably never find on my own and helped me form my own opinions and stance on policies. Before this class I would probably be closed off in my own bubble, ignore global/national policies and activities and just follow my own lifestyle to try to be as environmentally friendly and healthy as possible, but I am just much more aware now. Other than that, the structure and flow of the class definitely caught me off guard and took a while to get used to. I feel like in the beginning of the class everyone was excited about the class because everyone was wanted to input and discuss about the big picture of energy and energy policies like how will electricity be in 10 years? Will we have this technology? Will be get rid of this technology? etc.. However, as the class dragged on I see that everything gets more complicated and those "big" problems are tackled by first innovations to improve smaller and simpler issues. For example, the big problem to reduce energy consumption and CO2 emission is slowly being solved by switching to LED, more efficient refrigerators, solar panels, etc.. the problems still persist but there are improvements. I thought learning about those information, technology, and policies were interesting, but it was hard to form an opinion or discussion in class, so I thought the class intensity and energy kind of died off in some of those weeks.  
  
I didn't like how there was almost no structure to the project, I understand it was supposed to teach us to be independent, solve the problem in our own ways, and construct the project to our own standards and focus. However, I would like some more specific details and requirements, because for my project I could have spent all my time doing a cost analysis of different energy sources compared to renewable for Navajo Nation or come up with a technical electrical system to power a house through renewable sources or both and that would take up too much time. etc..
  - I liked the course overall, or at least the subjects that we went over. I loved learning about the physics associated with certain technologies. The tests, problem sets, and project were, in my opinion, not very helpful. I understand to some extent why they were more open, but I feel that they could have been made more concrete, so that we feel a sense of security in what we were learning or doing. For the problem sets, while I think they were interesting, I don't think they were a great way to test our understanding of the class. They had us look up data and report them and then do some calculations. The data itself can be somewhat difficult to find, so I usually ended up concentrating on that instead of understanding what to do with that data. The tests could be difficult, but when they were graded, I wasn't too sure why I lost some points on things, so it was hard to understand what I part of the subject I didn't understand. The project was also more open ended, the idea of which I like. However, practically, it ended up being that we had no idea what our actual objectives were. It felt like we could be working on something completely different than what was actually wanted, without us knowing until halfway into the quarter. Again, overall I liked the course, but not so much the structure of the class.
  - I loved parts of how much freedom we had throughout the course but some more structure as to what you wanted from us with regards to the projects would have been helpful. Definitely a unique class where I learned a lot and in a more all encompassing nature.
  - I really enjoyed the format of how the numbers could be changed in order to get rough ideas of things. The class gave me a really good idea of how to flexibly use numbers to better understand the politics of energy. I think that as a teacher, you should enforce more of a dictatorship than a democracy, while I like the concept, students do not make good decisions (speaking as one myself). I do appreciate the effort though.
  - I think that the reversed classroom setup doesn't really work because it gives no incentive to coming to class. With all the information online, I could have (and in many cases already had) learned the material in advance.

- My feelings for professor Schwartz began as fairly poor in the beginning of the quarter, because his class seemed extremely cluttered or lacking direction. As I got to understand the course more though, and Pete, I liked the class more and more. I learned a ton from his preclass lectures. Those were amazing and really thorough. His in class lectures though remained very unorganized and many times not prevalent or beneficial, even if interesting. Pete has a lot of energy and I can tell that he puts 110% into teaching, but sometimes that comes off as being too short/impatient with student questions, or spreading the class out rather thinly over too many assignments (mostly the unguided project). In the end though, I learned a lot.
- Need more organization in the curriculum. Expectations for workload and achievement are very accurate in my opinion. Material we learned about was enthralling and relevant. Could have used class time more efficiently with more activities
- Pete is a great teacher. He loves physics and his breadth of knowledge is such that he is able to converse about topics that are both closely and distantly related to physics. To improve, he should ditch the "flipped" classroom. Hearing him lecture in person I believe would be much more effective.
- Pete is great when it comes to face to face interactions, and is very well versed in his knowledge of the subject matter. That being said the whole online classroom assignments really took away any motivation I had to come to class, and when I did come to class Pete seemed to be all over the place and almost afraid of teaching. But I do like the inclusion of having an actual hands on project, learning by doing.
- The expectations for the midterms were not clearly defined until later in the course. The flipped classroom was difficult to get used to, but afterwards I felt it did encourage my personal research. More defined goals of the project would also have been nice.
- This class should be called politics of energy, not physics of energy. If it was called that, I wouldn't have taken it.
- Very interesting class. Learned a lot about politics and its relation with energy.  
Difficulties with getting use to reverse classroom, but eventually became a lot to better. Maybe provide some more guidelines with the projects as we were originally very lost on what were suppose to do initially.
- Wide scope of topics, very important material, fairly unorganized in priorities.