Instructor: **Hanson, Jordan**

Subject: **PHYS**

Catalog & Section: 135B 1

Enrollment: 23
Responses Incl Declines: 15

Declines: 0

Category Summary

Category	Number of Responses	Response Rate	Mean	Dept. Mean	Median	Dept. Median	STDEV
Self-Evaluation	135	65.2%	4.5	4.5	5.0	5.0	0.7
Instructor's Questions	30	65.2%	3.8	3.8	4.0	4.0	1.2
Course	105	65.2%	4.7	4.7	5.0	5.0	0.6
Professor - Jordan Hanson	135	65.2%	4.7	4.8	5.0	5.0	0.6

Demographics

Question	Number of Responses	Liberal Education	WSP requirement	Major requirement	Minor requirement	Elective/Interest
Why did you take this course? (Select primary reason.)	15	0%	0%	93%	0%	7%

Question	Number of Responses	First-Year	Sophomore	Junior	Senior	Graduate
What is your year in college	15	0%	0%	73%	27%	0%

Quantitative Data

All Likert Scale Questions - Self-Evaluation

Question	Number of Responses	Response Rate	Course Mean	Dept. Mean
I attended class regularly.	15	65%	5.0	4.9
I was academically prepared to handle the material.	15	65%	4.5	4.5
I came prepared for each class session (i.e. have read all course readings and completed assignments).	15	65%	4.6	4.6
I actively participated in class discussions.	15	65%	4.4	4.2
I attended scheduled office hours if I had questions about the course material.	15	65%	4.4	4.3
I tried to relate course material to other things I know and/or study.	15	65%	4.5	4.7
I worked to my full potential in this course.	15	65%	4.5	4.6
I was satisfied with my performance in this course.	15	65%	4.6	4.4
I had a strong desire to take this course.	15	65%	4.1	4.4

Note: 1:Disagree; 2:Moderately disagree; 3:Neutral; 4:Moderately agree; 5:Agree; -1:N/A;

All Likert Scale Questions - Instructor's Questions

Question	Number of Responses	Response Rate	Course Mean	Dept. Mean
The Pivot Interactive online laboratory activities were useful for understanding course concepts.	15	65%	3.8	3.8
The Pivot Interactive online laboratory activities were useful for practicing lab skills like data analysis and graphing.	15	65%	3.8	3.8

Note: 1:Disagree; 2:Moderately disagree; 3:Neutral; 4:Moderately agree; 5:Agree; -1:N/A;

All Likert Scale Questions - Course

Question	Number of Responses	Response Rate	Course Mean	Dept. Mean
This course had clear goals and objectives.	15	65%	4.9	4.9
This course was academically challenging.	15	65%	4.9	4.9
This course offered useful learning tools (such as lectures, discussions, readings, assignments and/or examinations).	15	65%	4.7	4.8
This course had grading criteria that were clearly identified.	15	65%	4.8	4.8
This course improved my understanding of the material.	15	65%	4.6	4.7
This course increased my interest in the subject matter.	15	65%	4.2	4.5
Overall, I would recommend this course to others.	15	65%	4.7	4.6

Note: 1:Disagree; 2:Moderately disagree; 3:Neutral; 4:Moderately agree; 5:Agree; -1:N/A;

All Likert Scale Questions - Professor - Jordan Hanson

Question	Number of Responses	Response Rate	Course Mean	Dept. Mean
The professor used class time effectively and demonstrated preparation for class.	15	65%	4.7	4.9
The professor's teaching style and/or enthusiasm for the material strengthened my interest in the subject matter.	15	65%	4.4	4.7
The professor was able to explain complicated ideas.	15	65%	4.5	4.7
The professor challenged students to think critically and/or imaginatively about the course material.	15	65%	4.7	4.9
The professor provided clear and timely feedback.	15	65%	4.9	4.7
The professor encouraged meaningful class discussions.	15	65%	4.6	4.8
The professor was receptive to differing views.	15	65%	4.8	4.8
The professor was available for help outside of class.	15	65%	4.8	4.9
Overall, I would recommend this professor to others.	15	65%	4.5	4.8

Note: 1:Disagree; 2:Moderately disagree; 3:Neutral; 4:Moderately agree; 5:Agree; -1:N/A;

Open Ended Responses

Written Comments (105 comments)

Q: What useful feedback could you provide the professor of this course? (Please be specific.)

- I think breaking down all the different equations as what each variable means, what the equations means, and how it is applied would really really help. Deriving equations isn't always helpful one the first equation isn't throughouly understood. Equations are powerful when the meaning of it and its application as well as significance as fully understood. I know that was something that lacked for me and it was a concern various other students raised during the course.
 Quicker feedback on test.
 This course was great!
- 3 This course was great!
- 4 The only part that was really challenging were the labs once we got to conductors I was really lost. So I would have preferred if Professor Hanson did the lab while students were following along and asked a question relating to the lab for understanding.
- 5 One thing Zorba did first semester was give us a 10 minute break halfway through class because 2 hours is a grueling journey. Plus hes really easy to learn from so I think if the students got a break they could reset and learn better overall
- 6 The online labs are not very useful and are very confusing.
- 7 The professor is extremely understanding and thats not common amongst most professors and it was really appreciated.
- 8 Professor uses class time to work examples rather than formal lecture which in my opinion is the best way to teach physics. He provides many examples and guides students into more critical thinking type questions.
- 9 Sometimes it felt that we were spending longer periods of time on the PHET activities than example questions.
- 10 Have labs that are easier to connect to the material
- 11 N/A
- 12 With the online format, sometimes lectures were a little hard to follow for the full two hours. That's just the nature of classes that are longer than an hour, but the online format really made it hard to stay focused the entire time.
- 13 N/A
- 14 explain the labs more
- 15 N/A

Q: What were the best aspects of this course? (Please be specific.)

- 1 I liked that the the Professor was very enthusiastic about the subject.
- 2 Learning about DC circuits.
- 3 The lectures were enjoyable.
- 4 I enjoyed the project that we did I even got my family involved to help me. So I was getting my project done and they were also learning physics. its a win win!
- 5 Hanson is a really cool professor and taught everything well. Super nice guy and enjoyed having him
- 6 The take home style tests. the study guides where also very helpful.
- 7 N/A
- 8 I really like that most classes included a lab. Labs help students have better understanding of complicated ideas. Professor highly encourages student discussion which allows for students to have better understanding by seeing why they were right or wrong and allows students to be receptive to a different method. My favorite thing is the anonymity of the clicker problems so students don't feel pressured to ask if they don't understand a concept.
- 9 I really do not enjoy physics as a course or discipline, but Professor Hanson is probably the kindest and most considerate professor I have yet had at this school. He was truly receptive to what we were asking for and what we needed to help us succeed.
- 10 n/a
- 11 N/A
- 12 Lectures were engaging and also the opportunity to present to the class
- 13 Clicker questions are very helpful
- 14 final project
- 15 The professors willingness to help his students.

Q: What would you change about this course? (Please be specific.)

1 I think taking time to slow down a bit on the material would really help us comprehend the material. There were times would a number of us would feel confused during class both before the pandemic and after and slowing down and doing more thorough examples would really help. I think that in addition to doing a temperature check looking at the students expressions to see if they

	have captured the materials would really help. Additionally, I think working through some homework examples would be really helpful as I sometimes felt the homework was a bit separated from the course. I also think that a bit more hands on lab would be more engaging and helpful. I also think when doing clicker problems I think the examples should be a bit more engaged so that they resemble the difficulty of the homework and or midterms.
2	Nothing.
3	Nothing I can think of.
4	Nothing
5	Reallly long but I know physics is a lot of material to cover
6	Less focus on labs.
7	N/A
8	Time of the course. 2 hours is difficult to keep focus. Or a break, even 5 minutes would be nice.
9	I didn't love the Pivot interactive labs, sometimes they did not work correctly and I often felt confused by the assignments.
10	Shorter classes, it's almost impossible to stay tuned in for the whole two hours.
11	N/A
12	Nothing
13	N/A
14	less random labs. clear outline of how to use lab equipment. more interactive hands on labs not online.
	N/A
Q: acc	Please evaluate your own performance in this course. That is, are you satisfied with your complishments in this course? If not, what should you have done differently to improve your performance d/or comprehension of the course material. I'm somewhat satisfied I would have loved to come out of the course with more of the ability to see the world through a Physics
Q: acc	Please evaluate your own performance in this course. That is, are you satisfied with your complishments in this course? If not, what should you have done differently to improve your performance d/or comprehension of the course material. I'm somewhat satisfied I would have loved to come out of the course with more of the ability to see the world through a Physics perspective.
Q: acc	Please evaluate your own performance in this course. That is, are you satisfied with your complishments in this course? If not, what should you have done differently to improve your performance d/or comprehension of the course material. I'm somewhat satisfied I would have loved to come out of the course with more of the ability to see the world through a Physics
Q: acc and	Please evaluate your own performance in this course. That is, are you satisfied with your complishments in this course? If not, what should you have done differently to improve your performance d/or comprehension of the course material. I'm somewhat satisfied I would have loved to come out of the course with more of the ability to see the world through a Physics perspective.
Q: accano	Please evaluate your own performance in this course. That is, are you satisfied with your complishments in this course? If not, what should you have done differently to improve your performance d/or comprehension of the course material. I'm somewhat satisfied I would have loved to come out of the course with more of the ability to see the world through a Physics perspective. I am satisfied with my performance.
Q: acc and 1 2	Please evaluate your own performance in this course. That is, are you satisfied with your complishments in this course? If not, what should you have done differently to improve your performance d/or comprehension of the course material. I'm somewhat satisfied I would have loved to come out of the course with more of the ability to see the world through a Physics perspective. I am satisfied with my performance. I am satisfied with my performance in this class. I felt I tried very hard to understand the material covered in this course.
Q: acc and 1 2 3 4	Please evaluate your own performance in this course. That is, are you satisfied with your complishments in this course? If not, what should you have done differently to improve your performance alor comprehension of the course material. I'm somewhat satisfied I would have loved to come out of the course with more of the ability to see the world through a Physics perspective. I am satisfied with my performance. I am satisfied with my performance in this class. I felt I tried very hard to understand the material covered in this course. Yes, I feel like I was able to switch my learning style to accommodate the new learning.
Q: acc and 1 2 3 4 5	Please evaluate your own performance in this course. That is, are you satisfied with your complishments in this course? If not, what should you have done differently to improve your performance done comprehension of the course material. I'm somewhat satisfied I would have loved to come out of the course with more of the ability to see the world through a Physics perspective. I am satisfied with my performance. I am satisfied with my performance in this class. I felt I tried very hard to understand the material covered in this course. Yes, I feel like I was able to switch my learning style to accommodate the new learning.
Q: acc and 1 2 3 4 5 6	Please evaluate your own performance in this course. That is, are you satisfied with your complishments in this course? If not, what should you have done differently to improve your performance d/or comprehension of the course material. I'm somewhat satisfied I would have loved to come out of the course with more of the ability to see the world through a Physics perspective. I am satisfied with my performance. I am satisfied with my performance in this class. I felt I tried very hard to understand the material covered in this course. Yes, I feel like I was able to switch my learning style to accommodate the new learning. Yes satisfied
Q: accanol 1 2 3 4 5 6 7	Please evaluate your own performance in this course. That is, are you satisfied with your complishments in this course? If not, what should you have done differently to improve your performance d/or comprehension of the course material. I'm somewhat satisfied I would have loved to come out of the course with more of the ability to see the world through a Physics perspective. I am satisfied with my performance. I am satisfied with my performance in this class. I felt I tried very hard to understand the material covered in this course. Yes, I feel like I was able to switch my learning style to accommodate the new learning. Yes satisfied Satisfied. I think I had a better understanding of the concepts from this semester than last, but this semesters material was much more
Q: acc and 1 2 3 4 5 6 7 8	Please evaluate your own performance in this course. That is, are you satisfied with your complishments in this course? If not, what should you have done differently to improve your performance in the course material. I'm somewhat satisfied I would have loved to come out of the course with more of the ability to see the world through a Physics perspective. I am satisfied with my performance. I am satisfied with my performance in this class. I felt I tried very hard to understand the material covered in this course. Yes, I feel like I was able to switch my learning style to accommodate the new learning. Yes satisfied Satisfied. I think I had a better understanding of the concepts from this semester than last, but this semesters material was much more difficult, so I'm proud of the effort and my performance this time around. I feel that I did my best in this course given that I struggle with this type of abstract "math", though I sometimes feel that I don't
Q: acc and 1 2 3 4 5 6 7 8 9	Please evaluate your own performance in this course. That is, are you satisfied with your complishments in this course? If not, what should you have done differently to improve your performance alor comprehension of the course material. I'm somewhat satisfied I would have loved to come out of the course with more of the ability to see the world through a Physics perspective. I am satisfied with my performance. I am satisfied with my performance in this class. I felt I tried very hard to understand the material covered in this course. Yes, I feel like I was able to switch my learning style to accommodate the new learning. Yes satisfied Satisfied. I think I had a better understanding of the concepts from this semester than last, but this semesters material was much more difficult, so I'm proud of the effort and my performance this time around. I feel that I did my best in this course given that I struggle with this type of abstract "math", though I sometimes feel that I don't understand what we learned.
1 2 3 4 5 6 7 8 9	Please evaluate your own performance in this course. That is, are you satisfied with your complishments in this course? If not, what should you have done differently to improve your performance done comprehension of the course material. I'm somewhat satisfied I would have loved to come out of the course with more of the ability to see the world through a Physics perspective. I am satisfied with my performance. I am satisfied with my performance in this class. I felt I tried very hard to understand the material covered in this course. Yes, I feel like I was able to switch my learning style to accommodate the new learning. Yes satisfied Satisfied. I think I had a better understanding of the concepts from this semester than last, but this semesters material was much more difficult, so I'm proud of the effort and my performance this time around. I feel that I did my best in this course given that I struggle with this type of abstract "math", though I sometimes feel that I don't understand what we learned. I did well
Q: acc and 1 2 3 4 5 6 7 8 9 10 11 12	Please evaluate your own performance in this course. That is, are you satisfied with your complishments in this course? If not, what should you have done differently to improve your performance differently to improve your performance differently to improve your performance. I'm somewhat satisfied I would have loved to come out of the course with more of the ability to see the world through a Physics perspective. I am satisfied with my performance. I am satisfied with my performance in this class. I felt I tried very hard to understand the material covered in this course. Yes, I feel like I was able to switch my learning style to accommodate the new learning. Yes satisfied Satisfied. I think I had a better understanding of the concepts from this semester than last, but this semesters material was much more difficult, so I'm proud of the effort and my performance this time around. I feel that I did my best in this course given that I struggle with this type of abstract "math", though I sometimes feel that I don't understand what we learned. I did well N/A
Q: accarded and ac	Please evaluate your own performance in this course. That is, are you satisfied with your complishments in this course? If not, what should you have done differently to improve your performance for comprehension of the course material. I'm somewhat satisfied I would have loved to come out of the course with more of the ability to see the world through a Physics perspective. I am satisfied with my performance. I am satisfied with my performance in this class. I felt I tried very hard to understand the material covered in this course. Yes, I feel like I was able to switch my learning style to accommodate the new learning. Yes Satisfied Satisfied. I think I had a better understanding of the concepts from this semester than last, but this semesters material was much more difficult, so I'm proud of the effort and my performance this time around. I feel that I did my best in this course given that I struggle with this type of abstract "math", though I sometimes feel that I don't understand what we learned. I did well N/A N/A

Q: How much, and in what ways, was your evaluation of the course affected by the shift to online teaching?

- 1 It became a bit challenging to keep up with the pace of the course.
- 2 Not much.

- 3 The course was affected a bit because we were not able to do any labs that are embedded in our lectures.
- 4 I felt like there wasnt much of a change because Professor Hanson was able to accommodate to the needs of students.
- 5 Not much

- 6 It was affected. The labs were harder to do online at home.
- 7 not much.
- 8 None, I think the professor adjusted the best he could and implemented labs that helped students understand material.
- 9 I don't think it changed my opinion greatly, we continued to have live lectures and Hanson was available for office hours just as before
- 10 Very, classes became boring and ran on for way too long.
- 11 N/A
- 12 Not very much, the use of zoom was excellent. Maybe lectures could be recorded on top of the other videos that were released
- 13 N/A
- 14 I did not like the online learning for this class.
- 15 Not much. When we couldn't do the labs in class, the pivot interactive was a great way to transfer that experience into online. However, the pivot interactive was very hard to figure out and work through for the correct answers.

Q: What did the professor do to change the course to an online format?

- 1 He tried to be more understanding with deadlines after a few weeks of going online.
- 2 Online tests and lectures through zoom.
- 3 We had an online lab stimulator that took place in absence of the labs we had in class. The lectures were held through soon for the remainder of the course.
- 4 He was able to use the pen tools to simulate as if we were in class
- 5 Online zoom meetings for notes
- 6 Zoom meetings, take home tests, new completely online labs
- 7 it was as if class was the same. he moved everything online.
- 8 Virtual labs. Still worked problems virtually. You can tell he put a lot of effort because he also made tutorial videos on concept sin addition to regular class.
- 9 We had biweekly zoom lectures and a different format for lab activities.
- 10 Online classes
- 11 N/A
- 12 Used zoom and pivot interactives, both were great
- 13 N/A
- 14 We did the rest of our labs online. We lectured on zoom and did quizzes on our own then as a class.
- 15 ^^ Answered above. And zoom classes.

Q: Focusing specifically on the online portion of the course, what worked well and what worked less well?

- 1 I would have really appreciated to have had the lectures recorded. I think it would have really helped as lecture was sometimes a bit too fast. The small videos pre-recorded were helpful.
- 2 Everything worked well.
- 3 Zoom worked pretty well for this course. I would say that the online labs were pretty confusing and a little tricky.
- 4 The lab simulations were difficult to do but other than that the class was fine
- 5 I think the zoom meetings worked well they were just a little long. 2 hours in class is tough and 2 hours on a video call is even tougher I think. Maybe an hour and a half on the zoom calls because I'm sure that will continue in the future
- 6 The take home tests worked well. The labs were not useful.
- His tablet and pen worked well cause it was basically a white board. I appreciated his test formats where it wasn't a super short time limit like all of my other science courses. But for the pivot activities most were helpful but a couple were extremely confusing as to what exactly they were asking for. and i can say i truly understood the topics it covered and still had problems with the way it was set up.
- I didn't personally like online labs, it takes away from the hands on approach but considering the circumstances, I think the way this class shifted online was as smooth as it could've been.

- 9 I was not a huge fan of the zoom lectures, though I understand that it couldn't be helped and connection issues are a given. However, Hanson's flexibility in adjusting our course schedule and format does him credit as a fairly new faculty member, especially with a baby on the way (Congratulations by the way! You're going to be great).
- 10 Class meetings worked well but they went on for too long.
- 11 N/A
- 12 Lectures and pivot interactives were great. Maybe if next semester is online, consider doing an hour of live lecture and then recording the second half. Sitting through two hours in an online class is very difficult sometimes, especially with all the distractions we have at home
- 13 N/A
- 14 This class was difficult to stay engaged with online as we weren't working with any material or answering questions like we usually do.
- 15 Everything worked well except for the pivot interactive.

Supplemental Questions

Supplemental Questions

Question	Number of Responses	Response Rate	STDEV	1	2	3	4	5	-1
The Pivot Interactive online laboratory activities were useful for understanding course concepts.	15	65%	1.2	0%	20%	20%	20%	40%	0%
The Pivot Interactive online laboratory activities were useful for practicing lab skills like data analysis and graphing.	15	65%	1.2	7%	7%	27%	20%	40%	0%

Note: 1:Disagree; 2:Moderately disagree; 3:Neutral; 4:Moderately agree; 5:Agree; -1:N/A;