



**USC** University of  
Southern California

Individual Report for Instructor Lototsky  
(39665-20201 : MATH-445 Mathematics of  
Physics and Engineering II (39665))

Project Title: **Learning Experience Evaluations - Spring 2020**

Courses Audience: **39**

Responses Received: **15**

Response Ratio: **38.46%**

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Report Comments

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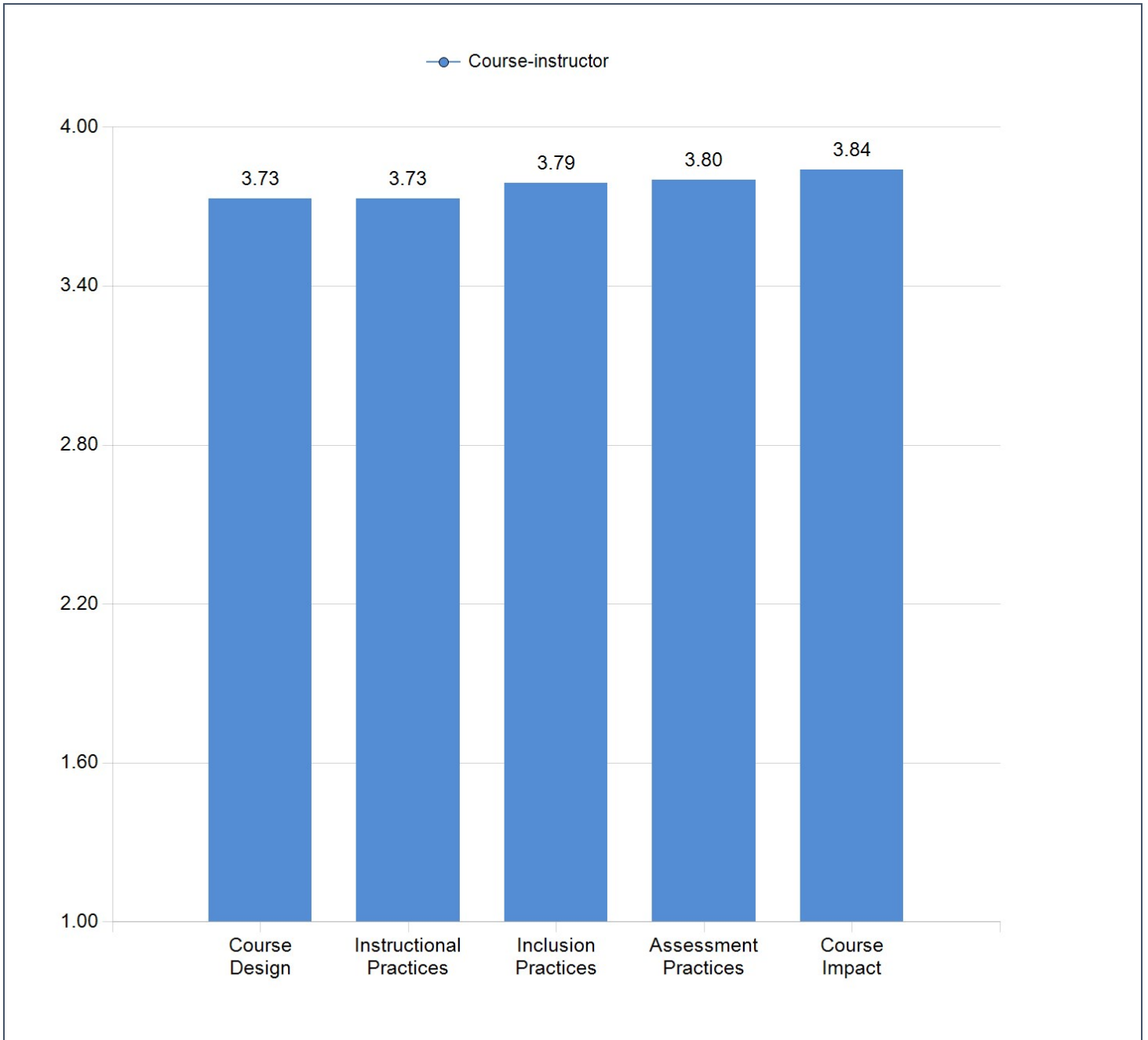
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Creation Date: **Wednesday, May 20, 2020**



## LEARNING EXPERIENCE SUBSCALE ANALYSIS

### Learning Experience Subscale Average Score



Competency	Course-instructor	Standard Deviation
Course Design	3.73	+/-0.50
Instructional Practices	3.73	+/-0.54
Inclusion Practices	3.79	+/-0.41
Assessment Practices	3.80	+/-0.44
Course Impact	3.84	+/-0.37

**COURSE DESIGN**

	N	Mean	Std. Deviation
The course objectives were well explained.	15	3.73	0.46
The course assignments were related to the course objectives.	15	3.80	0.41
I understood what was expected of me in this course.	15	3.67	0.62

**INSTRUCTIONAL PRACTICES**

	N	Mean	Std. Deviation
The instructor carefully explained difficult concepts, methods, and subject matter.	15	3.47	0.74
The instructor encouraged me to do my best work.	15	3.80	0.41
The instructor encouraged questioning and discussion of course topics from the students	15	3.93	0.26

**INCLUSION PRACTICES**

	N	Mean	Std. Deviation
The course materials included diverse perspectives OR applications to diverse populations.	14	3.86	0.36
The instructor used a variety of teaching approaches to meet the needs of all students.	15	3.73	0.46
The instructor was receptive to the expression of diverse student viewpoints	14	3.79	0.43
The instructor demonstrated sensitivity to students' needs and diverse life experiences	15	3.80	0.41

**ASSESSMENT PRACTICES**

	N	Mean	Std. Deviation
The assessments/assignments reflected what was covered in the course.	15	3.67	0.62
The grades I have received thus far reflect the QUALITY of my performance in the course.	15	3.87	0.35
The criteria for good performance on the assignments or assessments were clearly communicated.	15	3.87	0.35
The instructor's evaluation of my performances was constructive.	15	3.80	0.41

**COURSE IMPACT**

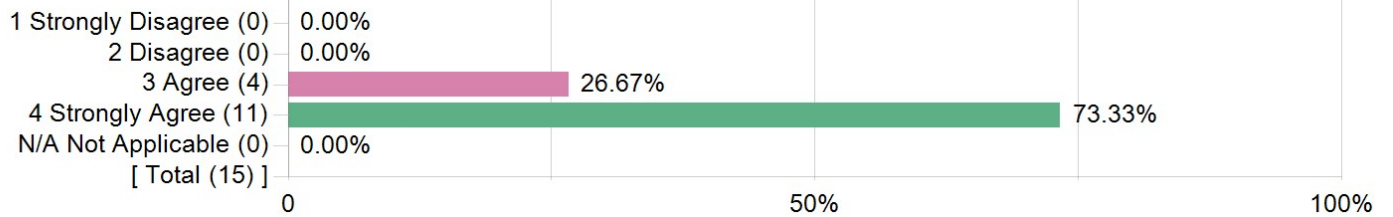
	N	Mean	Std. Deviation
I learned perspectives, principles, or practices from this course that I expect to apply to new situations.	15	3.80	0.41
This course challenged me to think critically and communicate clearly about the subject.	15	3.93	0.26
This course provided me with information that may be directly applicable to my career or academic goals.	15	3.80	0.41

## LEARNING EXPERIENCE SUBSCALE ANALYSIS: COURSE DESIGN

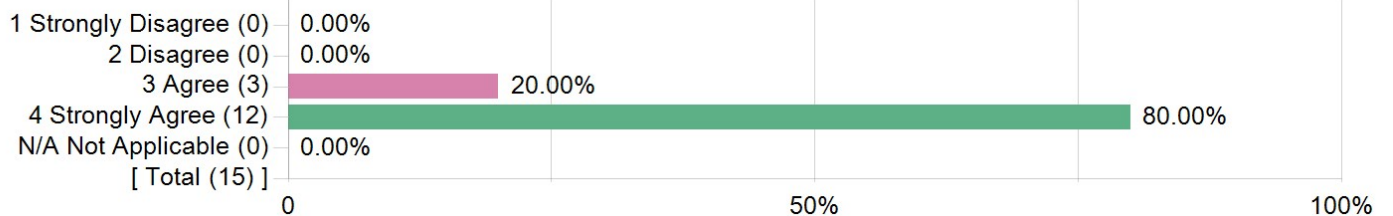
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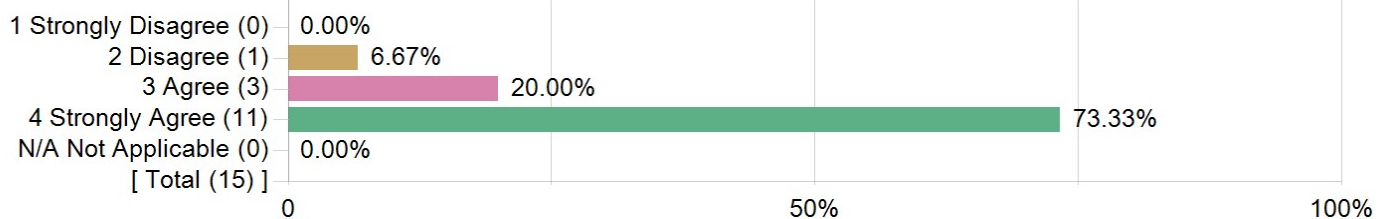
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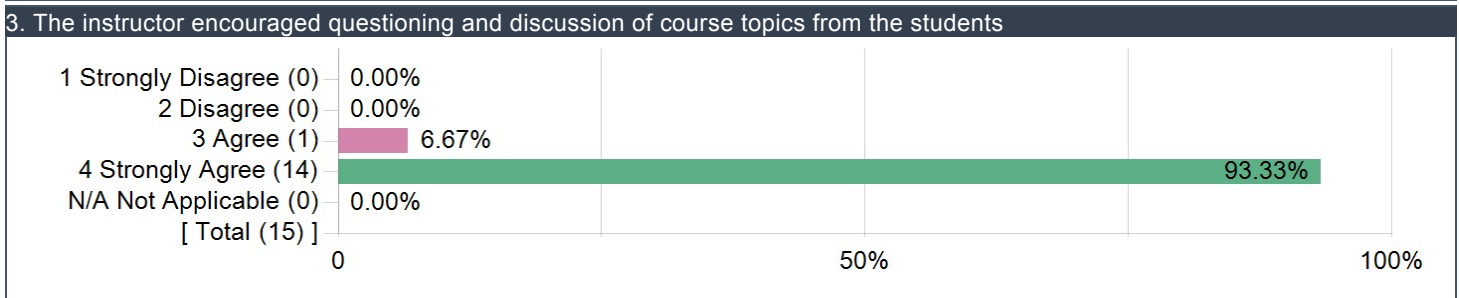
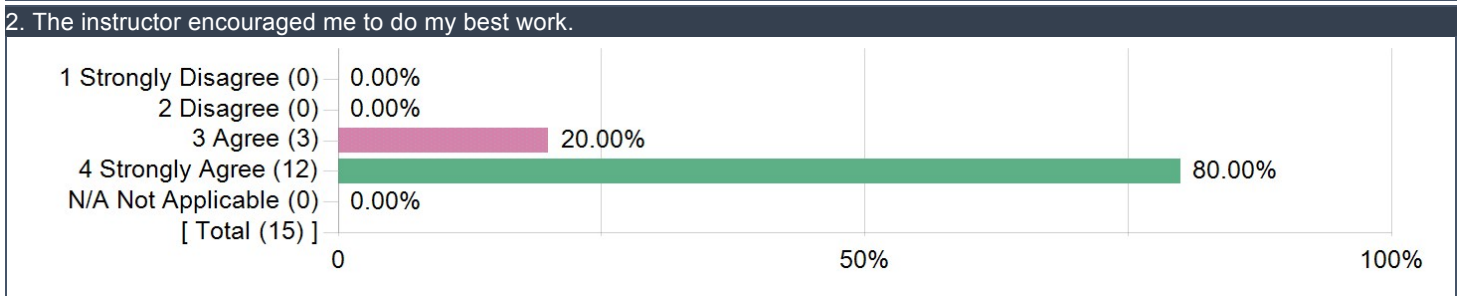
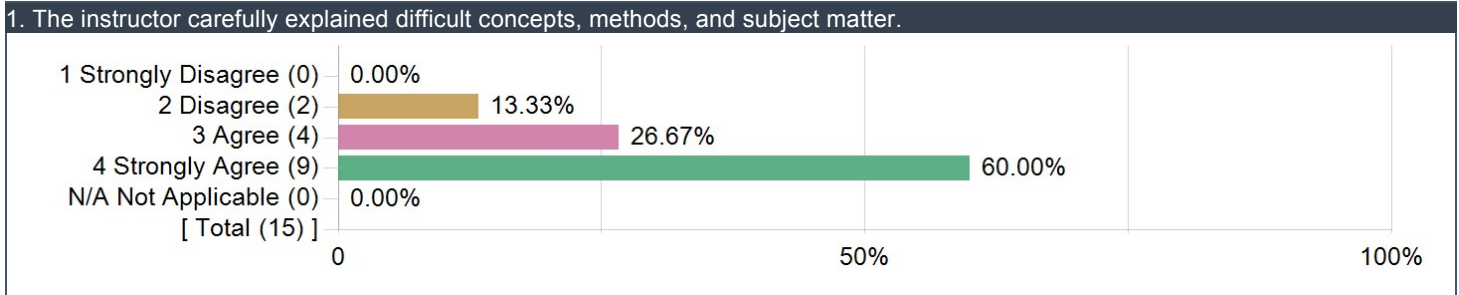
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## LEARNING EXPERIENCE SUBSCALE ANALYSIS: INSTRUCTIONAL PRACTICES

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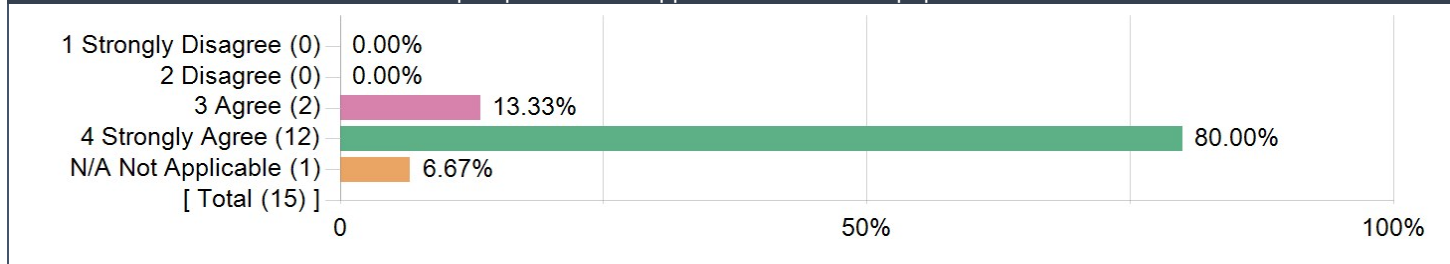


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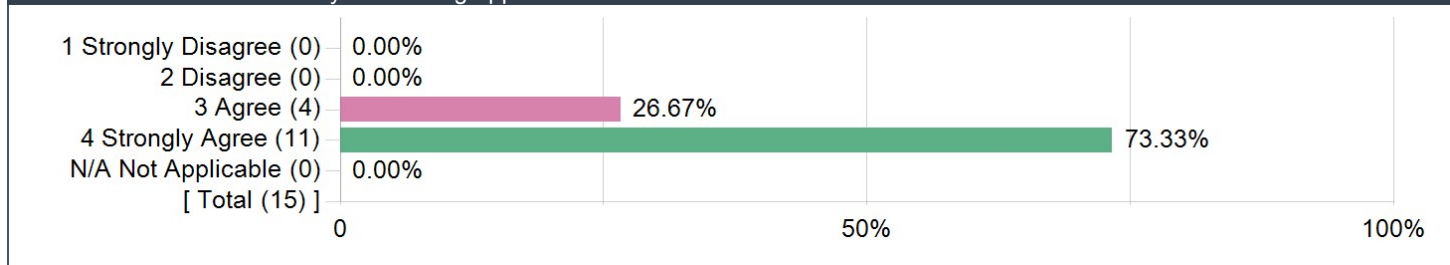
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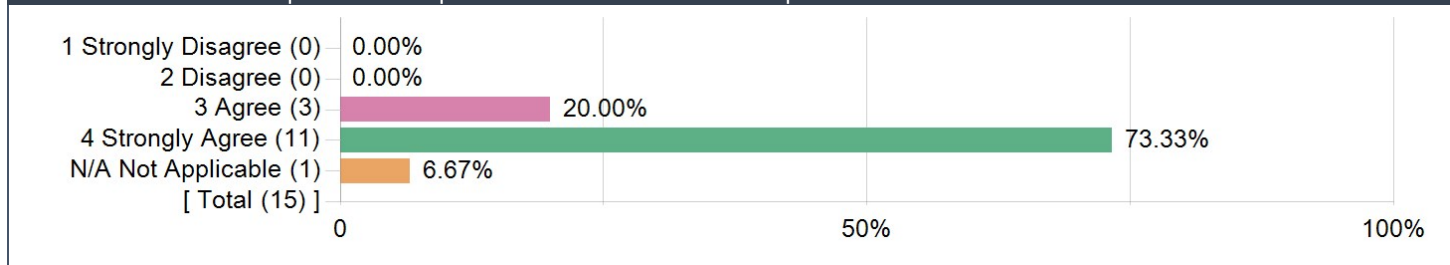
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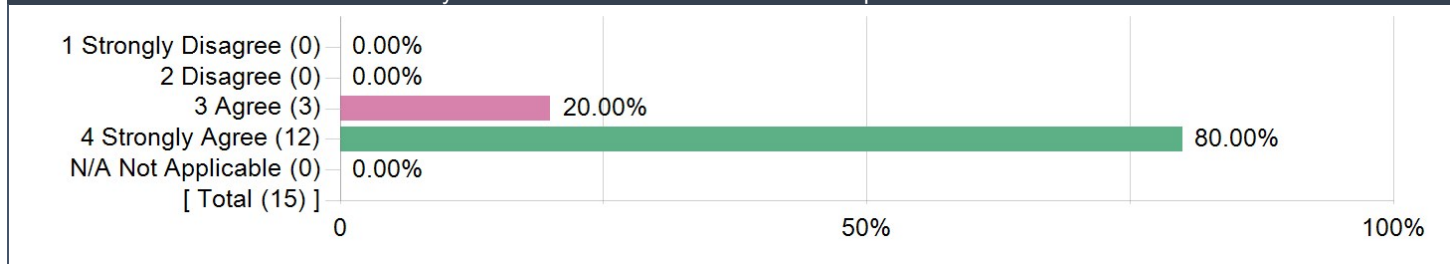
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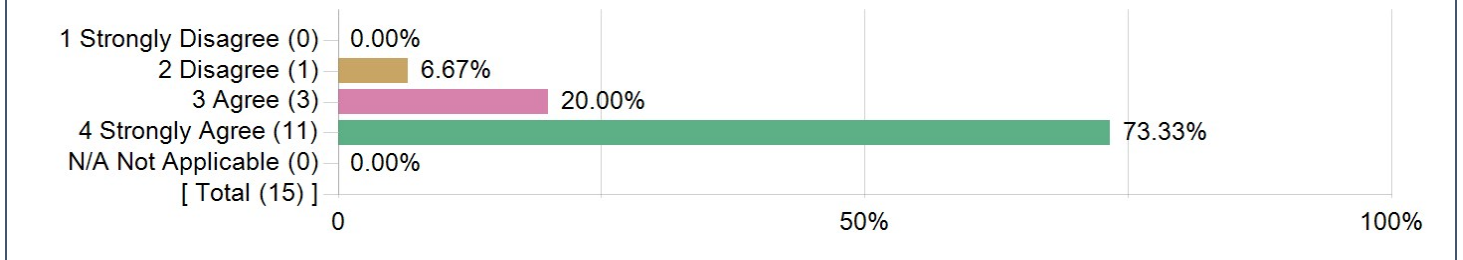


## LEARNING EXPERIENCE SUBSCALE ANALYSIS: ASSESSMENT PRACTICES

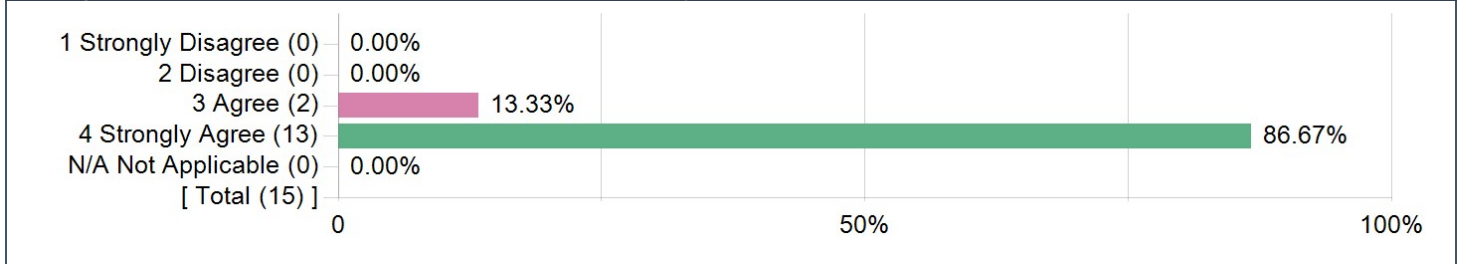
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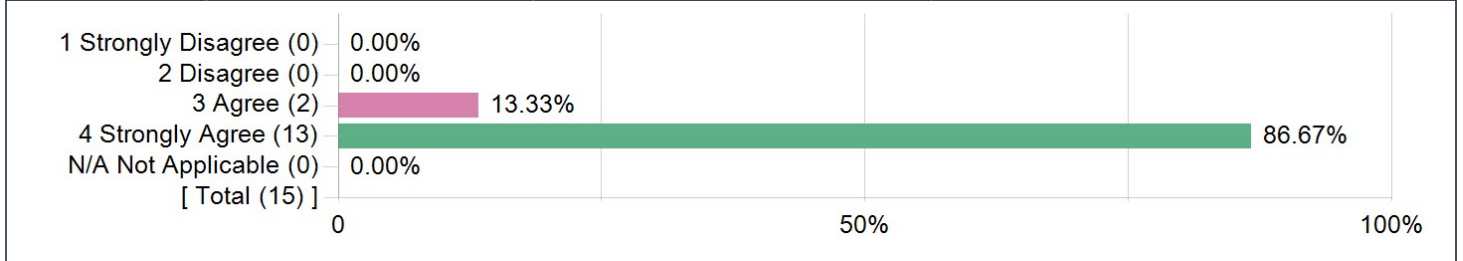
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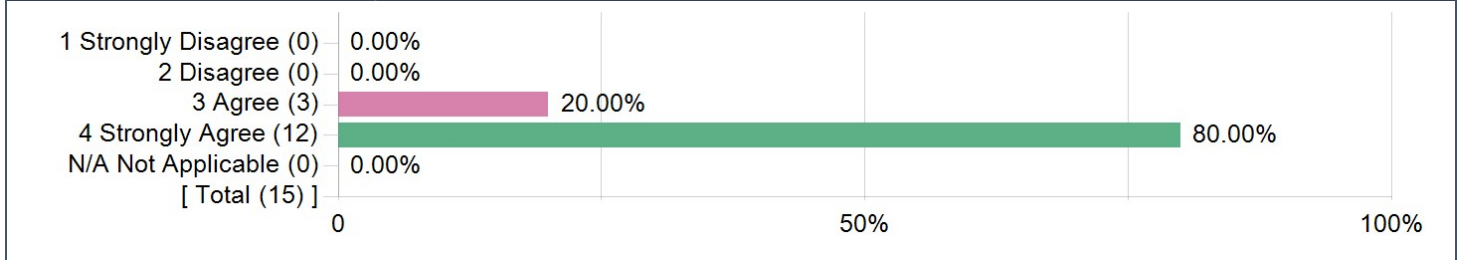
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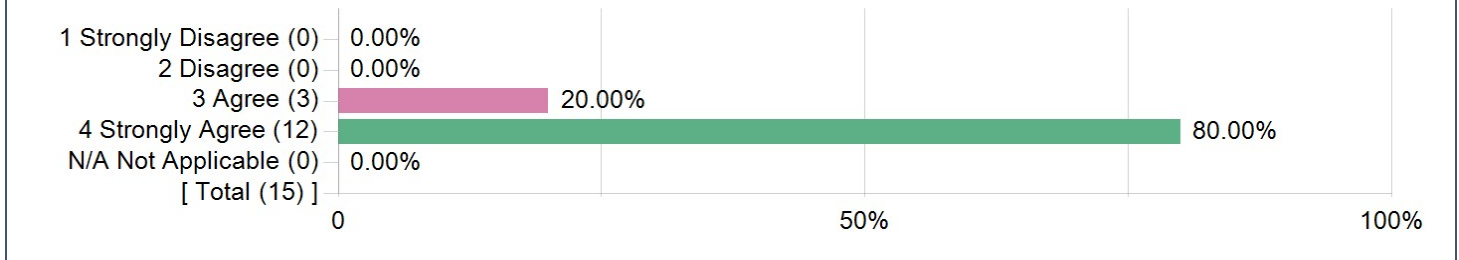


## LEARNING EXPERIENCE SUBSCALE ANALYSIS: COURSE IMPACT

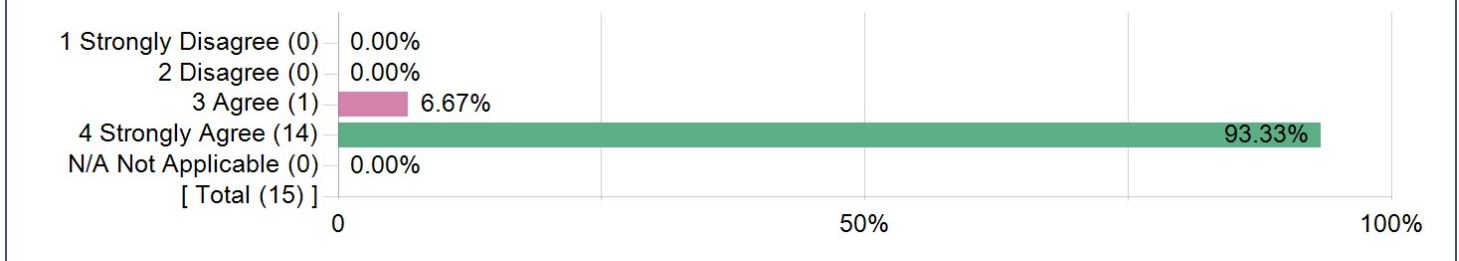
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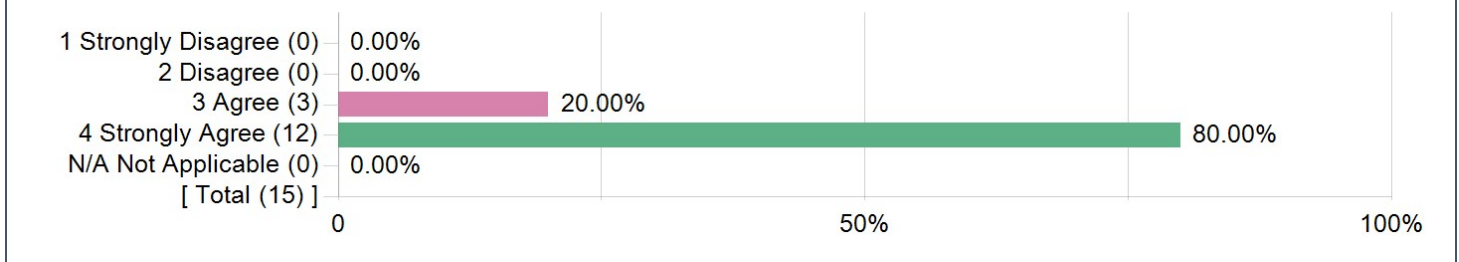
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#### 3. This course provided me with information that may be directly applicable to my career or academic goals.





**If you have selected at least a "Strongly Disagree" or "Disagree" option with one of the previous statements on COURSE DESIGN, INSTRUCTIONAL PRACTICES, ASSESSMENT PRACTICES or COURSE IMPACT, please describe a change that would improve that aspect of the course.**

Students

Professor Lototsky is a very smart person and knows his material very well. He takes a different approach to teaching (trying to provide broad context and history of formulas that we learn in lecture). However, when it comes to the application of the material, he does not teach us well. His lecture style is extremely theoretical and often times very unnecessary (unless you want to study the history of math and derivations of formulas). In my opinion, this is a math class geared toward applying the material for practical application and that was not covered by Professor Lototsky at all. Overall, he is a good professor, but I wish he would spend more time teaching us how to apply the material.

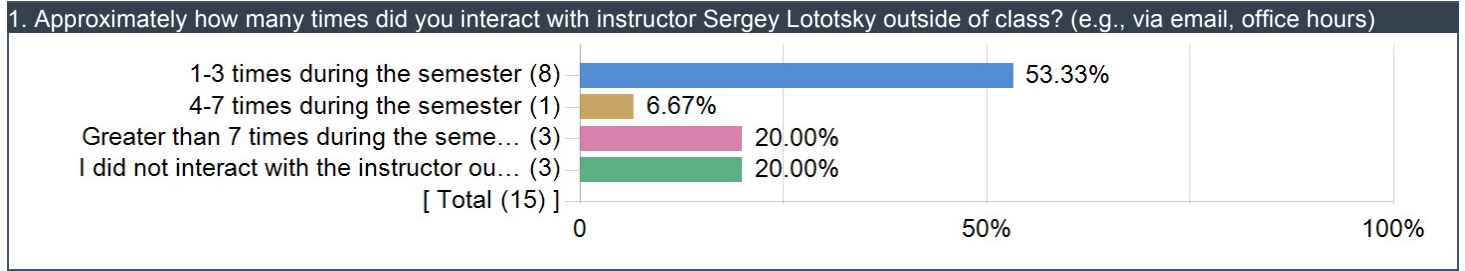
Sometimes difficult concepts weren't explained well enough. Professor Lototsky encourages us to ask questions, but I wished that he would slow down and explain the basics more thoroughly. Sometimes, not all the time, he would write the formula down and not explain where it comes from, for example.

**Is there additional information or feedback that you would like to share with instructor Sergey Lototsky ?**

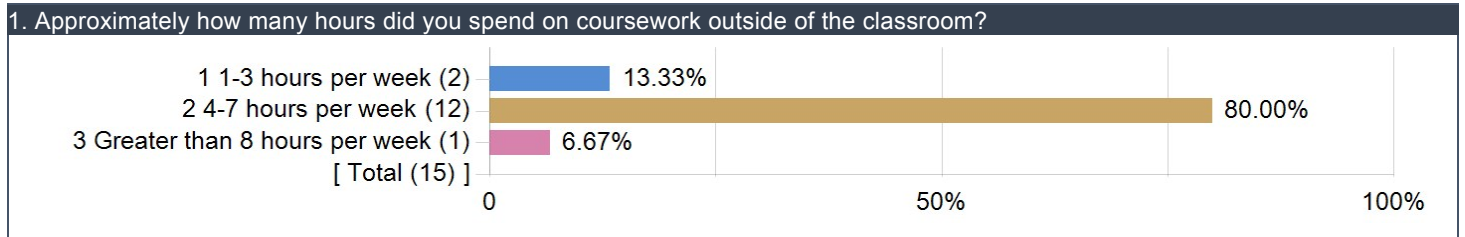
Students
<p>Professor Lototsky does a wonderful job painting a panorama of mathematics. While some students are displeased with his not focusing solely on exam questions, he goes beyond simply professing the quotidian homework/exam material and extends what we're learning into the far reaches of theory and application, which I will always argue is way more useful (at least for me who is an aspiring theoretical physicist). (Also I quite enjoy the historical sidenotes and the Cyrillic transliterations digressions.)</p>
<p>Thank you so much for teaching the class in the way you did. It enabled me to focus on learning over grades. Additionally, its scope included things that I will directly learn in my major (physics) while also going more deep into math than I ever expected. This later was especially enjoyable. Small things like mod and sup to larger concepts like cauchy-riemann proofs expanded my mathematical understanding greatly,</p>
<p>Profess Lototsky is really enthusiastic about math and his teaching is really good! He is really caring and a really nice person!</p>
<p>At the beginning of the semester, Professor Lototsky performed interesting demonstrations. After courses go online, Professor Lototsky provided very detailed course notes and instructions for projects. Those materials were very helpful for learning. Professor Lototsky takes students needs seriously and is very responsive. As a graduating senior, I've taken several courses with him, and thanks a lot to his patience and help. In general, MATH 445 is an interesting course.</p>
<p>No, Professor Lototsky is the best.</p>
<p>The lectures are very interesting, although difficult to follow if a student is still trying to learn the concepts from the previous lecture. The lecture makes more sense when it is rewatched online, or after seeing the material in discussion first. It seems to me that in general, the material in lecture is more difficult (but also more interesting) than what is covered in discussion. May I suggest having the TA teach some of the material in discussion before it is covered in lecture, instead of afterwards? That could help us get "warmed up" and be better prepared to listen to the cool things you have to say in lecture.</p> <p>Also, cross referencing the textbook more often (maybe at the start of lecture) would help, as I often used the textbook to learn concepts at my own pace but occasionally couldn't find where to look in the textbook.</p>
<p>Dr. Lototsky, you clearly care about the subject taught in this course and are eager to share it with us. I appreciate that.</p>
<p>Although sometimes I had trouble keeping up with the material, Professor Lototsky was always incredibly kind/understanding, and willing to go the extra mile for his students. I'm really glad I was able to take one of his courses before graduating.</p>
<p>Lecture and discussion were not always sufficient for teaching the procedures and methods necessary to complete the homework and computer projects. There was a nice harmony between the interesting math taught in class and the step by step computation of problems in discussion, but not enough time to get through all questions and problems. Some concepts and topics were less explored than others which I feel did not accomplish a true understanding of the concepts in class. A recommendation would be to offer less homework problems, more time to complete the longer assignments, or offer more extensive solutions to students to understand the problem if there is not sufficient time for it to be taught in discussion. That being said, Professor Lototsky was an absolute joy in class. He started off each lecture with something interesting and showed real passion for the subject. He kept the class engaged with some humor, some history facts, and a lot of cool math. He is one of those lecturers you WANT to listen to, and his voice resonated with me outside of class as I explored topics he brought up during lecture. Although he is very intelligent, an incredible human being who runs marathons, and on a level most of us only dream of attaining, he is humble and has only ever encouraged us to reach new heights. Again, a true joy to learn from, as a professor and a human being.</p>
<p>I appreciated how you would talk about interesting things during the first 5–10 minutes of class. I feel like I learned a lot of interesting and important things. Thank you for a great semester.</p>

## STUDENT ENGAGEMENT ANALYSIS

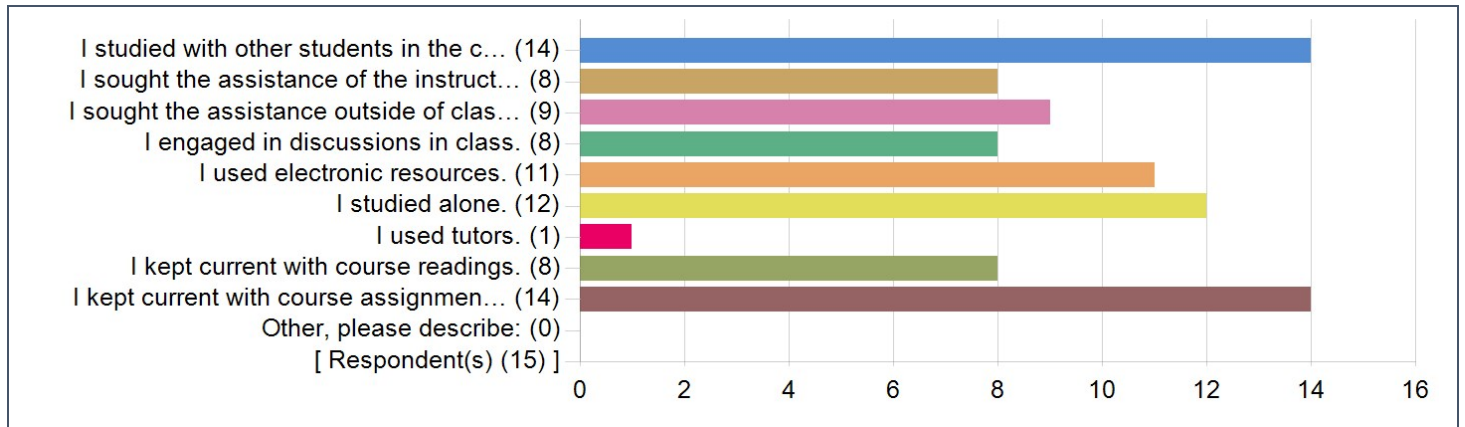
### Number of Instructor Interactions Outside of Class



### Approximately how many hours did you spend on coursework outside of the classroom?



### In what ways have you participated in your learning for this course? (Please select all that apply.)



**Please describe the MOST valuable aspect(s) of this course.**

Comments
The professor's ability to enrich lectures with extra information—information especially catered to physicists and engineers.
The math concepts we learned in class and their application.
Homework and computer projects
Professor just did what every professor should do. However, so many professors have not done what they supposed to do. For example, put lecture notes a day earlier before the lecture. Have the class scheduled and planned at the beginning of the class and stick to it. Even though tases things may seem very tiny and small, however, not many professors do them on time. Also, Professor Lototsky explained things clearly in the lecture, gave us hard but reasonable tests, good amount of homework and assignments. Also, the computer projects actually helped me a lot.
There is so much to learn and so many interesting examples covered.
The material is incredibly interesting and directly applicable to me (as I am a Mechanical Engineering major).
I have actually used all the concepts learned here in all my other physics courses
The instructor touches upon topics beyond the course which piqued my interest most of the times
This class is an applied maths course, and Lototsky did a good job teaching it as such, by not making it proof-heavy and by mostly teaching things that he thinks would help us in physics and engineering. The topics of this course are extremely valuable, and I am glad I was able to learn basic complex analysis and PDEs. The examples in lecture and in discussion were extremely helpful, and I don't think anything was a waste of time. Also, at first I thought the computer projects were a waste of time, but I think they are extremely valuable for some of us who want to pursue research in math or physics someday.

**Please describe the LEAST valuable aspect(s) of this course.**

Comments
Exams
With all of the interesting examples presented, it can be difficult to orient myself and understand what the big picture is. Perhaps this is because I took this course as a non-engineer or physics major; I'm a quantitative biology major who just wanted to learn the mathematics in case it may be useful to me in graduate school. I'm not sure if my situation is unique, but I wish we talked about the importance of the concepts we were learning. It might have been more obvious to an engineer or someone who took 245 (I took 225), but once I realized what the connections were between everything we learned, everything made so much more sense. I wish we talked about this more often, although maybe we did, and I just missed it.
This class, in my opinion, is to learn techniques to solve higher-order differential equations and other types of partial differential equations. However, Professor Lototsky spent most of his time going through the history of relevant formulae and derivation without focusing at all on application (which increased the amount of difficulty significantly).
The stress and anxiety it gave me, to be expected however.