Course Evaluation Summary & Reflection

End-of-Semester Course Evaluations (Quantitative)

In my courses at UH, course evaluations are administered to students electronically by the department at the end of each semester. I have summarized results of these evaluations from each of my courses for which I have student evaluations available below:

Key

- N - # of survey respondents in my section (# of respondents for whole department)
- Q1 - *Rate the overall teaching effectiveness of this instructor* - 1 (Poor) to 5 (Excellent)
- Q2 - *Instructor encourages student participation, welcomes questions and discussions* - 1 (Strongly disagree) to 5 (Strongly agree)
- Q3 - *Instructor presents material in a clear and understandable way* - 1 (Strongly disagree) to 5 (Strongly agree)

Semester	Course	Format	Enrollment	N (Dept. N)	Q1 My Avg. (Dept. Avg.)	Q2 My Avg. (Dept. Avg.)	Q3 My Avg. (Dept. Avg.)
Fall 2017	PHYS 1301	Lecture	200	78 (2215)	4.51 (3.77)	4.74 (4.20)	4.58 (3.84)
	PHYS 1301	Studio	72	26 (2215)	4.65 (3.77)	4.81 (4.20)	4.65 (3.84)
Spring 2018	PHYS 1301	Lecture	200	104 (2197)	4.75 (3.94)	4.80 (4.31)	4.72 (4.02)
	PHYS 1301	Lecture	200	78 (2197)	4.63 (3.94)	4.77 (4.31)	4.65 (4.02)
	PHYS 1301	Studio	72	36 (2197)	4.97 (3.94)	4.92 (4.31)	4.83 (4.02)

*Averages for the UH Dept. of Physics are shown in parentheses next to my section averages

**Evaluations are not yet available for my current courses. My current courses include 2 lecture-based sections of PHYS 1301 with 250 and 200 students each and 1 studio section of 72 students.

End-of-Semester Course Evaluations (Qualitative)

The feedback that I receive from students both informally through office hours and formally through course evaluations helps me understand what aspects of the course students find most helpful and where improvements may be needed. End-of-semester evaluations often cited that students particularly appreciated my accessibility outside of class, passion for the subject, the interactive format of the course, and the availability of helpful resources. I have included a few student testimonials below:

Student 1 - Spring 2018 - "Dr.Bain is by far the best professor I have had in my college career. Throughout this course, he has made a relatively difficult course interesting, and easy to follow. He was always so helpful when anyone had questions, and was easy to reach if we had any questions or concerns."

Student 2 - Fall 2017 - "Dr. Bain was a phenomenal professor! He was very attentive and flexible to the needs of his students! Dr. Bain showed his passion and enthusiasm for Physics everyday when he came to class, and this made me desire to learn more. Dr. Bain did an awesome job with using different methods or different ways to explain a topic so were able to fully understand the problems. I would definitely choose Dr. Bain as my professor in the future.

Student 3 - Spring 2018 - "If I could rate him any higher, I would. Dr. Bain shows extreme interest in this subject, as well as interest in his students succeeding. He answered every question diligently, as well as answered our emails very fast. I met with Dr. Bain every week to discuss problems over the homework and any other questions I had. I previously took another professor last semester who was not

as helpful and I was failing the course and had to drop with a W. Dr. Bain has helped me succeed in this course, I even have the possibly of an A due to him. Absolutely the best professor I have ever taken here at UH."

Student 4 - Spring 2018 - "Dr.Bain is an excellent professor. Although I may not have scored the amount that I would've liked to, he was always there for office hours and available to answer anything that may not be clear. He always respected us students and made it very aware that he wanted us to all succeed in his class."

Student 5 - Fall 2017 - "Dr. Bain really cares about his student's and their success. I attempted to take this same course with him in the past and I took him again anyway because I knew that if I put in the work I could excel in the course, and I have. I personally love how organized he is and his use of technology. He always had such a great attitude during all lectures. His office hours were the best, better than any other Professor at UH. The material is difficult but he presents it in a manner where if you put the effort, you will surely learn something from this course. I would definitely take him again if I could."

Student Information Surveys

To supplement the department evaluations, I have administered my own surveys to collect data from students to help me improve my courses. In the spring of 2018, I surveyed 460 of the students enrolled in my course on a number of topics including, but not limited to, what course resources they used most often, whether they had attended drop-in physics tutoring/office hours, their work schedules, and what resources they found most helpful. Feedback from these surveys prompted me to increase the availability of various electronic resources, allocate additional time for students to work through TopHat workbooks in my studio courses, and increase office hours availability. Thoughtful student testimonials have also helped me improve the wording of my problems, the design of homework/in-class assignments, and the pacing of each class.

Additionally, as a part of research I am conducting at UH to identify ways to improve student outcomes in introductory courses, I have developed beginning/end-of course surveys to collect information on students physics/math background, their use of course resources, and their confidence in their physics problem solving skills. Many students have expressed to me that they were quite apprehensive about signing up for a physics class. Since this can impact their expectations of and performance in the course, collecting more data on students' experience will allow me to develop targeted resources to help lower barriers to learning for students from a wide variety of backgrounds.

Teaching Triangles

In addition to student evaluations, gathering feedback from peers is essential to improving as an instructor. As a graduate student, I had the wonderful opportunity to participate in Duke's *Teaching Triangles* program in the spring of 2016. The program groups graduate students from disparate research fields to observe each other's teaching and later meet to provide constructive feedback. I was paired with a Master's student in documentary film studies and Ph.D. student in biology. Both students were excellent instructors and had unique perspectives on how I could improve my teaching. Since they were far afield from physics, they focused their teaching observations on the dynamics of my interactions with students, and provided several suggestions for activities to improve student engagement and promote discussion that I incorporated into my discussion sections. Having had this experience, I would welcome future opportunities to have other faculty both within and outside of faculty observe my instruction.