



Engineering Spring 2020 Instructor Report for SP2020.T17.JME.3700.01 - Fluid Mechanics (Michael Wendl)

Project Title: **WashU Spring 2020 Course Evaluations**

Courses Audience: **71**
Responses Received: **25**
Response Ratio: **35.21%**

Report Comments

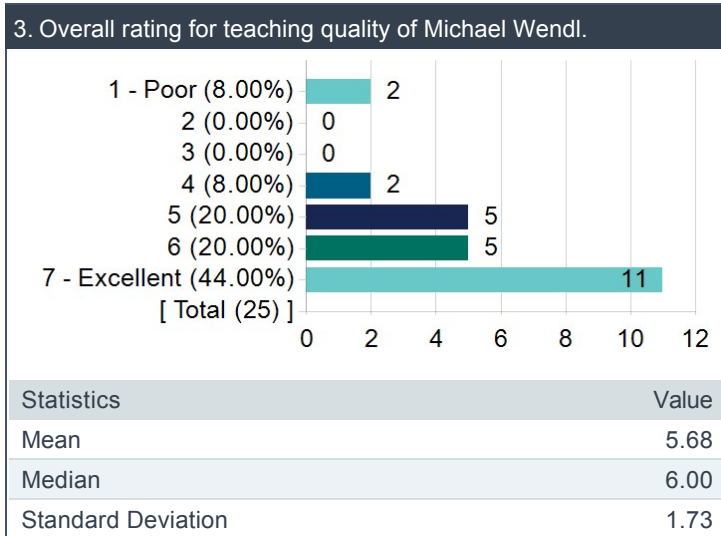
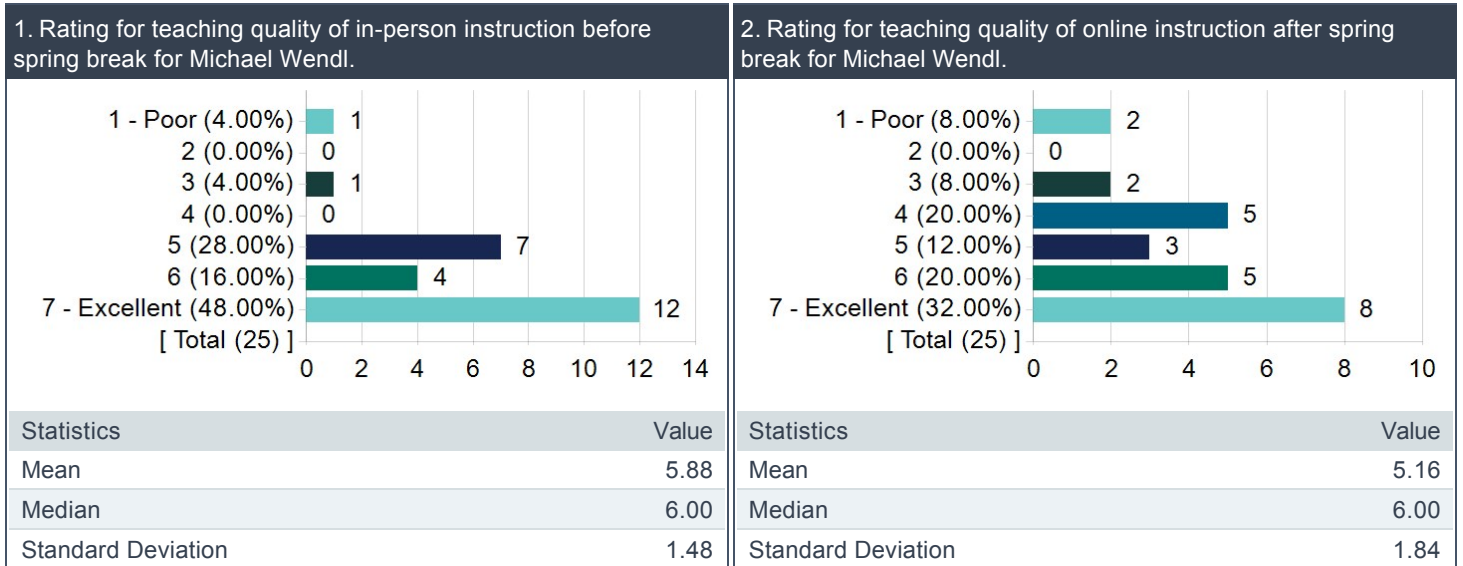
Welcome to your Instructor Report for WashU Course Evaluations. Below you will find response data from the specified course section. Responses to personalized questions appear at the bottom of the report.

The intention of this report is to provide feedback, and also to prompt improvement in areas that may be lacking. This report is accessible to appropriate department level and school level users, as determined by your school. We appreciate your dedication to our learning community at Washington University.

If you have questions about this report, please contact evals@wustl.edu

Creation Date: **Thursday, May 21, 2020**

Rating for Teaching Quality



Individual Scores (side-by-side)



Department and School Comparisons

Question	Subject			Department (JME)			School (T)		
	Mean	Standard Deviation	Median	Mean	Standard Deviation	Median	Mean	Standard Deviation	Median
In-person	5.88	1.48	6.00	5.84	1.35	6.00	5.99	1.37	7.00
Online	5.16	1.84	6.00	5.21	1.77	6.00	5.75	1.59	6.00
Overall	5.68	1.73	6.00	5.75	1.48	6.00	5.95	1.42	7.00

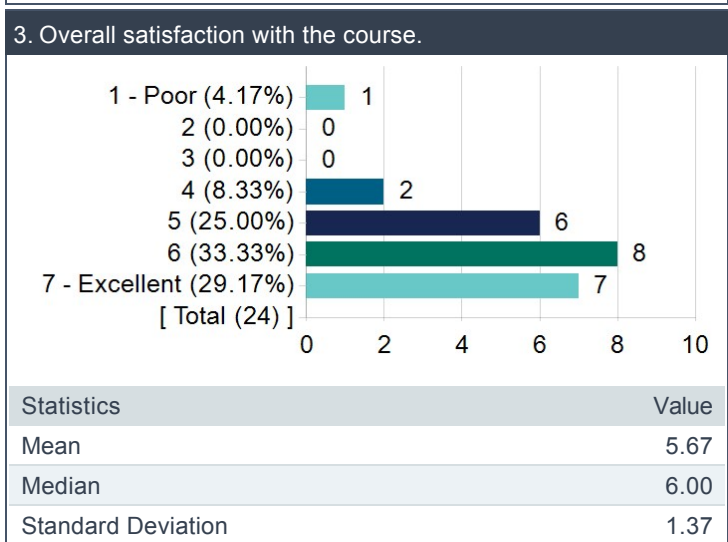
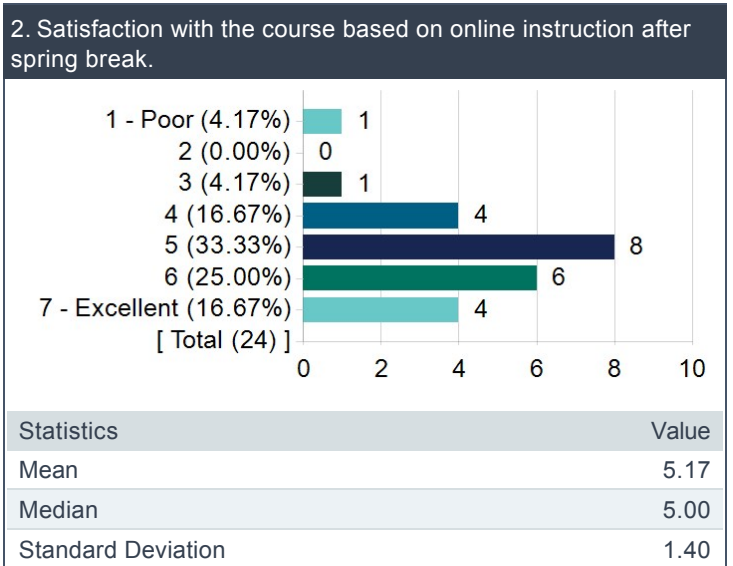
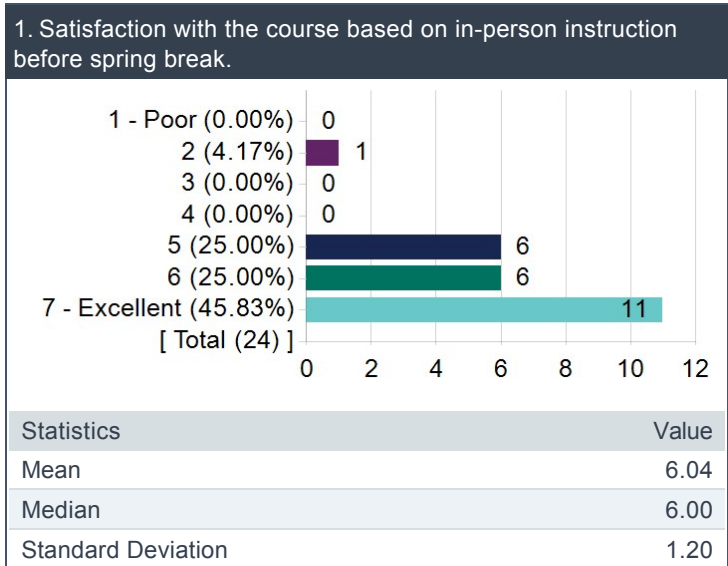
What did you like the most about Instructor Michael Wendl?

Comments
He's very passionate about the things he teaches and is very knowledgeable as well.
His knowledge and experience.
He knew what he was talking about and was extremely knowledgeable
He does an excellent job of explaining the material. He is enthusiastic about students asking questions, any type of question.
Very knowledgeable man who has done a lot in his field of expertise, you felt accomplished just being in his class.
Wendl is the kind of guy to solve riddles before they're even told. He has an uncanny ability to make sense of concepts and ideas, no matter how complex they are.
Extremely knowledgeable
He always has an answer to any question.
He is very good at sketching diagrams
He did a really good job of explaining topics in class and answering student questions.
He clearly knows what he is talking about and is able to explain any topic in the course in several different ways to clarify any misunderstandings.
he is a great teacher!
How intelligent and fluent he is in the subject.
He is so good at helping you visualize something, analyzing it, and solving something about it. He has a gift of taking things from his mind that he knows and putting them into your mind.
He took the time to help every student understand the material during lecture. It is very clear how passionate he is about his work which is very refreshing.
Communicate well and keep his word.
Presents difficult material in a way that is easy to understand, simply a great instructor.
He cares about his students a lot and acknowledges that the material is hard. He is extremely understanding and gladly goes over misunderstood material a second time. It's really nice to have a professor that cares about your performance and your understanding of the material.
nice guy as a person
Great teacher. VERY SMART
I thought his method of teaching was very effective and he made it easy to ask questions.

How could Instructor Michael Wendl improve?

Comments
The only aspect of Professor Wendl's class that was negative was the class size. This probably isn't possible to improve drastically but maybe finding a better suited class room would help.
Hes so busy that it's hard to get his attention on things.
With having an instructor who is so knowledgable it can be hard to teach the material to someone who is learning so it was hard to follow sometimes. I know it is a hard class, but sometimes information was too above me to even comprehend (talking theory) when he gave examples and equations i understood
Too much material and too difficult
I understand that he values the theory behind fluid mechanics, but it is extremely difficult to understand theory when we have no idea the potential application first
Suggested practice problems would be very beneficial, whether they be hand made or from the book.
If online courses turn out to be less temporary than is currently planned, some additional online resources would be helpful. For instance, taking tests with the lockdown browser in a quiz format on canvas seems more efficient than paper tests.
sometimes its a little hard to follow him cause he will jump around different sections in the topic, but other than that it was good
i think he is as good as he can be, but online learning its just not the same as face to face.
I wish I had some advice for improving, but he is just such a good teacher that it'd be extremely difficult to come up with something.
If he stayed a little more on track with the lecture.
Shift the focus to more example problems
Since it is a difficult study class, he could've gone through explaining more the basic stuff for everyone gets comfortable with the new material
be organized
He can sometimes go a little over our heads with the amount of knowledge he has.
I have no suggestions.

Satisfaction with the Course



Individual Scores (side-by-side)



Department and School Comparisons

Question	Subject			Department (JME)			School (T)		
	Mean	Standard Deviation	Median	Mean	Standard Deviation	Median	Mean	Standard Deviation	Median
In-person	6.04	1.20	6.00	6.01	1.31	6.00	5.91	1.44	6.00
Online	5.17	1.40	5.00	5.01	1.75	5.00	5.57	1.62	6.00
Overall	5.67	1.37	6.00	5.62	1.32	6.00	5.79	1.49	6.00

What did you like most about this course?

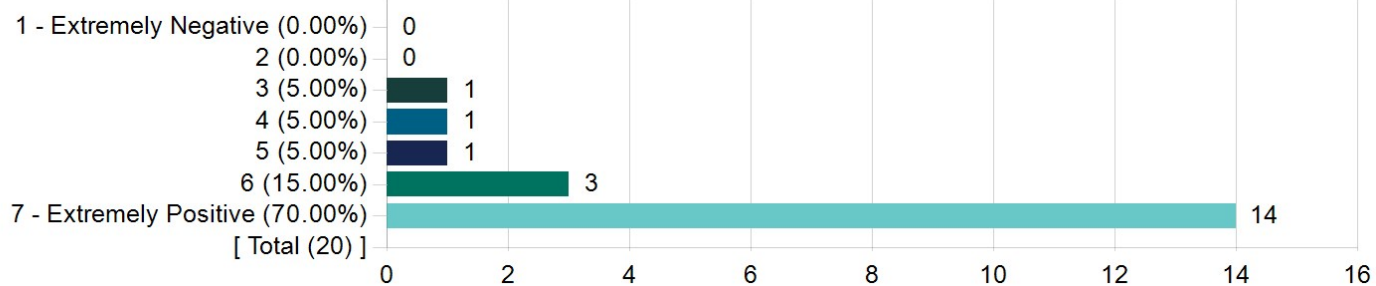
Comments
Professor Wendl was a great instructor, and I always took something out of his lectures.
How relevant it is.
It was a new class, i haven't had a class on this topic before so it was interesting and it was nice having such a knowledgeable professor
The material covered is very interesting and it is a subject encountered everyday. The professor's teaching style and knowledge keep the students engaged in the material.
Wendl. I'd have him as my instructor for every class from here on out, if that were possible.
The professor
I do feel like I have a good understanding of fluid mechanics and its theory
It's relevant to real life situations.
I really appreciate that more information was given in lectures than was required to know for tests and homework. We learned about some extremely complicated topics, in case we delve further into the field of Fluid Mechanics, but were not penalized for only understanding the more basic level applications.
its was very structured and well build.
The material we covered.
How much my analytical thinking and general problem solving improved.
I enjoyed the applications of this material. I want to do biomedical engineering and relating fluids to blood flow was interesting to me.
Material of this course
Dr. Wendl's presentation of the material, it can be very dry at times but doesn't feel like it.
Interesting to learn about
The professor

How could this course improve?

Comments
Decreased class sizes would help, but I realize that's probably not possible.
Bigger classroom
Have less theory parts and more equation learning and examples.
Give the professor the right type of software and training to do a better job with online writing.
Professor Wendl spoke of the National Committee for Fluid Mechanics Films (NCFMF). They're really good videos. He should select from the list certain videos for the students to watch each week, as they pertain to the various concepts covered throughout the semester. It'd be great for us students.
Have better TA's
The homework is extremely difficult/impossible without outside information, ie chegg. The lecture really needs to relate more to the homework and test
More suggested practice problems.
If the course was one more credit hour, there would probably be enough time to cover all the information the class is designed to cover. Having some extra session with the instructor to ask questions outside of class might also help solve this issue, although admittedly neither ideas are the most viable solutions.
not beeing online.
Need to take more time for more example problems during lecture.
Less focus on proofs of the governing equations, more focus on application of those equations.
organize the notes, format the notes, communicate clearly. Professor did not respond to emails (but did send read receipt) until i CCed him and emailed one of the TAs to ask if that was the correct email for the professor
Not be too far over our heads
Online made it a little harder to cover as much material as desired, but that's not the professors fault.

Learning Environment

Please rate how well Michael Wendl promoted an inclusive learning environment with regard to the diversity of student personal backgrounds and identities.



Statistics	Value
Mean	6.40
Median	7.00
Standard Deviation	1.14

Comments

We had numerous students of different foreign backgrounds or maturity levels. Professor Wendl would treat them with integrity and respect.

neither agree nor disagree with the above statement

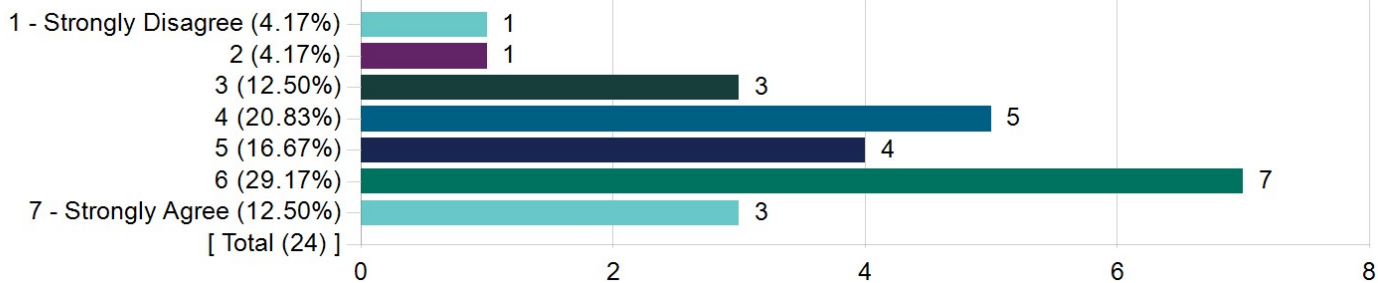
Who is complaining about not being included?

No matter what questions were asked or who asked them, professor Wendl always took as much time as necessary to ensure that the question was sufficiently answered and that the entire class had a firm grasp on the material being discussed.

He was very understanding and genuinely nice with everyone.

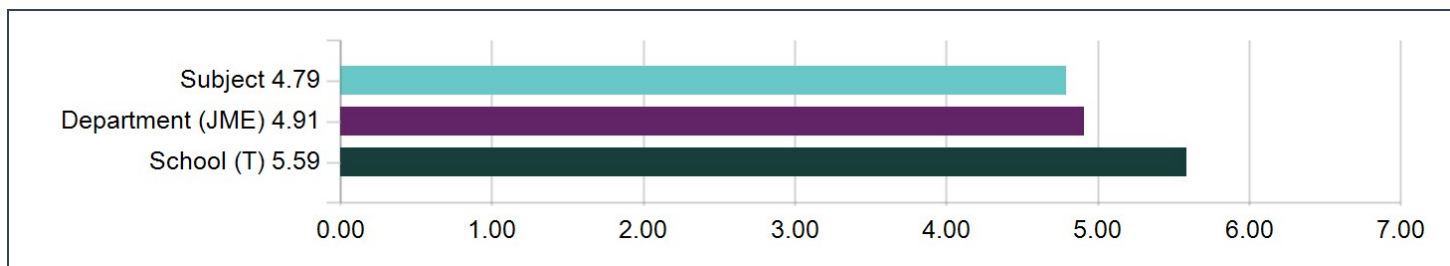
The online model still allowed me to learn the material.

The online model still allowed me to learn the material.



Statistics	Value
Mean	4.79
Median	5.00
Standard Deviation	1.61

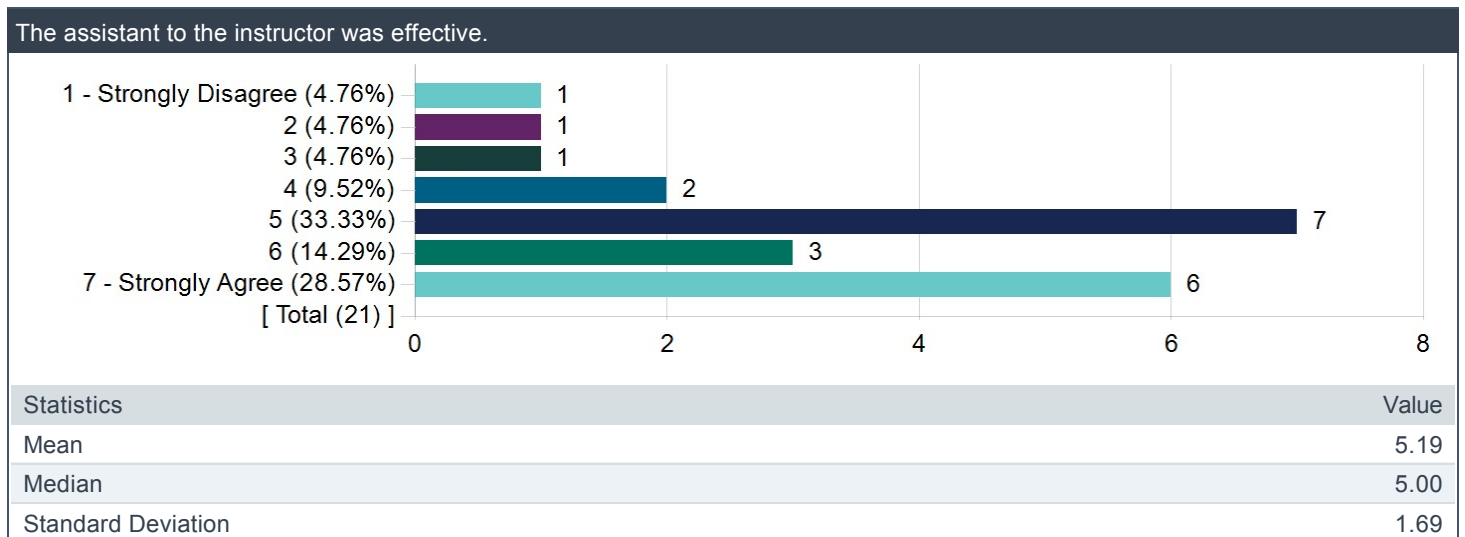
Department and School Comparisons



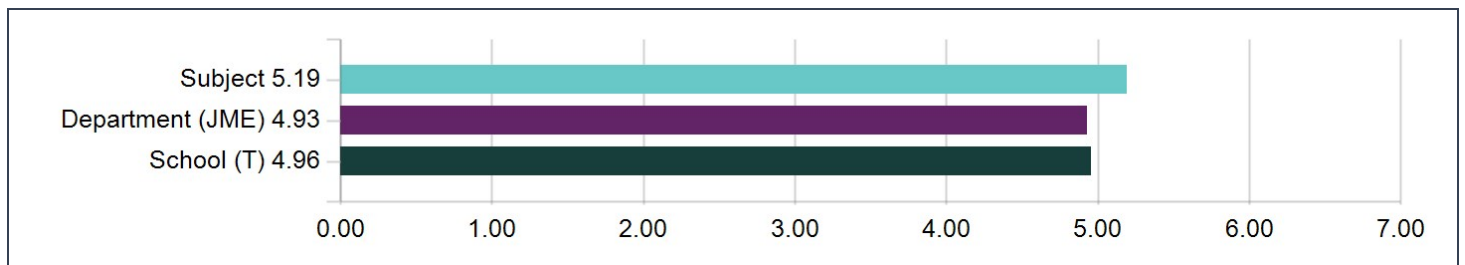
Please comment on how to improve the online learning experience in this course.

Comments
I had no problems with the online learning. It might help to use examples out of the text book the class currently has. There were a lot of examples out of the 6th edition of the text even though students were required to buy the 7th edition.
Better screen sharing app. Dr. W jumps around a lot and it's hard to follow in class and impossible from home when he jumps to earlier work.
Its hard to be online for this course. Watching him write on zoom lost some of the info and he eventually found something that worked for him but it was tough to learn
The professor needs a much better format for writing out notes for students. The online notes are nothing even comparable to the large blackboards. The professor would be far more effective using a large chalkboard and being videoed. For those who love computers, I don't understand how a 12" screen with only 2-4 lines of an instructor's information (written notes) is even in a discussion with the effectiveness of a large chalkboard.
Let me be clear: online SUCKS. But Wendl is that good. Having to go online minimally reduced the quality of his explanation of the scheme of things, so it still worked well. It only sucks that we got to cover less material due to lost time.
Not very good
Have TA sessions, and an online way to access our old homework graded and tests graded so we can see our mistakes
Refocus, the lecture must change to adapt to the inefficiencies of online learning. Acting like nothing needs to change made it even harder to learn online
Having a mini Q&A session with the instructor each week to go over any questions on that week's lectures could be beneficial. Also, finding a way to return tests and homework with grader's comments would be extremely helpful. They could just edit the pdf files and send them back to students for a small fee from each student to make up for the extra work.
maybe give more time and extra time for consultatiions with teacher after class.
Maybe record the lecture before class and watch before class and ask questions at class time
Instructor notes available "real time" for individual students. In a classroom I can focus on any area of the board, whenever needed for clarity. However the view of the online notes is limited, and driven by the presenter. For example, I may want to look at a previous step but cannot since they've scrolled past it.
It was pretty tough to do large problems on such a small screen
I don't think there is a way. Nothing is quite the same as in person. I think over all the professor did a great job by utilizing a white board app.

The assistant to the instructor was effective.



Department and School Comparisons



Please comment on the effectiveness of the assistant to the instructor (AI).

Comments
I personally never asked the AI for help.
They were really good AI's
Never interacted with the TA's and they too wayyyy too long to grade material and get it back to the students. If students have hard deadlines to get work in, teachers should have hard deadlines to get the graded work back. It was over a month before we received our test grades back and even then we had to ask the professor multiple times to get our actual scores rather than the curved letter score. The grading feedback was very poor for this class.
Email response was up, coordination was good, the couple TA sessions I attended, he did well (Mike Lee in particular, couldn't make it to the sessions with Xiang). I would've liked more feedback on my homework, though.
Half the time the TA would not have looked at the material beforehand and he would not do a good job explaining and get the problem
The TA's were extremely helpful during office hour sessions.
I did not have the pleasure of meeting Xiang, but Michael Lee was very helpful and knowledgeable. He held weekly help sessions and would help us understand the problems we had without giving us any specific answers.
They were both great teacher aid and helped significantly outside of class with tutoring. They were very intelligent on the topic.
I don't believe the AIs had the answer keys for the homeworks because they never seemed to know how to guide the students in the right direction. They definitely did their best though.
They were both helpful
They were available and scheduled time for study sessions each week. That was fantastic.

Please elaborate if you felt the grading system was not consistent and equitable.

Comments
I had no issue with the grading system for the course.
The teacher and TA's took far too long to give grades back to students. The professor would defend the TA's a bit when students asked for weeks about their test score, but from a PAYING student's perspective, the TA's signed up for the task and I do believe that they are being paid for their time. If they can't handle the additional work, hire more TA's to grade, or the TA's shouldn't have signed up for the task in the first place. The feedback for homework and especially test scores was terrible. More than a month to get an exam score back is inexcusable. We didn't even get our tests back to review our work and we didn't get our actual scores back. There is no reason for that.
Xiang as the TA graded too impartially
I found the grading system very fair.
The grading was consistent
never got anything back graded or not, no idea if it was fair or not
N/A

Please elaborate if you felt the material was not covered at a reasonable pace.

Comments
I had no issue with the pacing
it was fine
After we went online it became EXTREMELY difficult to know when information was important
The material was covered at a fairly quick pace by default, but as soon as questions arose, the professor would pause to elaborate on the topic for as long as needed to bring everyone to the same pace before picking the pace back up.
we had to rush through last few chapters because of time limitations.
rambled at length on some topics, then would brisk through following material to catch up.
N/A

Early in the semester, did your professor explain the expectations for academic integrity?

Early in the semester, did your professor explain the expectations for academic integrity?			
Options	Count	Percentage	
Yes	23	100.00%	
No	0	0.00%	

Have you observed any violations of academic integrity (e.g., cheating) in this course?

Comments
No
No
No
no
No.

Any additional comments?

Comments
Thanks for a great semester!
Dr. Wendl is by far one of the best and most interesting professors I have had the pleasure of meeting. He is extremely patient and passionate about sharing knowledge. I am more inspired than I've ever been to continue learning and growing as a person.
Michael Wendl is the best teacher I have ever seen. WASHU better keep him as long as they can.
All things considered I think the second half of the semester went far better than I first feared.
He is very knowledgeable
Professor Wendl did a great job teaching this class and I think he adapted to online better than any of my other professors.